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Presidential Documents

Title 3—

The President

Proclamation 9474 of August 19, 2016

National Employer Support of the Guard and Reserve Week, 2016

By the President of the United States of America

A Proclamation

For more than two centuries, brave patriots have given of themselves to secure our fundamental rights to life, liberty, and the pursuit of happiness—and in times of both war and peace, members of the National Guard and Reserve have stood ready to don our uniform, answer our Nation's call, and protect our way of life. This week, we recognize the important role played by the families, employers, and communities of these men and women in ensuring they can step forward and serve our country when they are needed most.

There are more than one million members of our National Guard and Reserve. Throughout the year, they dutifully train and prepare so that when they are called at a moment's notice to serve their Nation, they are able to serve with the honor and dedication that have long been hallmarks of our Armed Forces. Balancing their lives as civilians with their responsibilities in uniform, they defend and protect our people at home and abroad. In the face of natural disasters and humanitarian crises, they are quick to respond and offer assistance; during periods of conflict and strife, they help keep us safe and protect our national interests.

These citizen-Soldiers, Sailors, Airmen, Marines, and Coast Guardsmen deserve the full backing of their civilian employers and the promise of a secure and stable life here at home. From the businesses that seek to recruit and retain these patriots in the workplace to the supporters who provide leadership and resources, this unconditional care for our Guardsmen and Reservists and their families is part of what makes our military the greatest fighting force the world has ever known.

Americans who volunteer to serve their country should always be able to partake in its opportunities. First Lady Michelle Obama and Dr. Jill Biden's Joining Forces initiative has worked to make it easier for military spouses and veterans to find employment and ensure they are supported in the workforce. And my Administration has worked across all sectors to encourage communities to hire veterans and match members of the Guard and Reserve to the jobs they deserve. We must never waver in our commitment to fight for those who have fought for us, and we must continue striving to connect each of them with opportunities to keep their families strong and our country competitive.

During National Employer Support of the Guard and Reserve Week, let us honor the members of our Guard and Reserve for their steadfast dedication to us all—both in and out of uniform. And let us acknowledge the families, employers, and businesses whose encouragement and flexibility have enabled our military to thrive, and whose support has been vital to the success, stability, and security of our Nation.

NOW, THEREFORE, I, BARACK OBAMA, President of the United States of America, by virtue of the authority vested in me by the Constitution and the laws of the United States, do hereby proclaim August 21 through August 27, 2016, as National Employer Support of the Guard and Reserve

Week. I call upon all Americans to join me in expressing our heartfelt thanks to the members of the National Guard and Reserve and their civilian employers. I also call on State and local officials, private organizations, and all military commanders to observe this week with appropriate ceremonies and activities.

IN WITNESS WHEREOF, I have hereunto set my hand this nineteenth day of August, in the year of our Lord two thousand sixteen, and of the Independence of the United States of America the two hundred and forty-first.

[FR Doc. 2016–20394
Filed 8–23–16; 8:45 am]
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Rules and Regulations

Federal Register

Vol. 81, No. 164

Wednesday, August 24, 2016

This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

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OFFICE OF PERSONNEL MANAGEMENT

5 CFR Part 532

RIN 3206–AN37

Prevailing Rate Systems; Redefinition of the Asheville, NC, and Charlotte, NC, Appropriated Fund Federal Wage System Wage Areas

AGENCY: U.S. Office of Personnel Management.

ACTION: Final rule.

SUMMARY: The U.S. Office of Personnel Management (OPM) is issuing a proposed rule to redefine the geographic boundaries of the Asheville, NC, and Charlotte, NC, appropriated fund Federal Wage System (FWS) wage areas. The final rule will redefine Alexander and Catawba Counties, NC, from the Charlotte wage area to the Asheville wage area. These changes are based on a consensus recommendation of the Federal Prevailing Rate Advisory Committee (FPRAC) to best match the counties proposed for redefinition to a nearby FWS survey area.

DATES: *Effective date:* This regulation is effective on August 24, 2016. *Applicability date:* This change applies on the first day of the first applicable pay period beginning on or after September 23, 2016.

FOR FURTHER INFORMATION CONTACT: Madeline Gonzalez, by telephone at (202) 606–2858 or by email at *pay-leave-policy@opm.gov.*

SUPPLEMENTARY INFORMATION: On April 27, 2016, OPM issued a proposed rule (81 FR 24737) to redefine Alexander and Catawba Counties, NC, from the Charlotte, NC, wage area to the Asheville, NC, wage area. FPRAC, the national labor-management committee responsible for advising OPM on matters concerning the pay of FWS employees, reviewed and recommended these changes by consensus. There are no FWS employees stationed in Alexander or Catawba Counties.

The proposed rule had a 30-day comment period, during which OPM received no comments.

Regulatory Flexibility Act

I certify that these regulations will not have a significant economic impact on a substantial number of small entities because they will affect only Federal agencies and employees.

List of Subjects in 5 CFR Part 532

Administrative practice and procedure, Freedom of information, Government employees, Reporting and recordkeeping requirements, Wages.

U.S. Office of Personnel Management.

Beth F. Cobert,

Acting Director.

Accordingly, OPM amends 5 CFR part 532 as follows:

PART 532—PREVAILING RATE SYSTEMS

■ 1. The authority citation for part 532 continues to read as follows:

Authority: 5 U.S.C. 5343, 5346; § 532.707 also issued under 5 U.S.C. 552.

■ 2. Appendix C to subpart B is amended by revising the wage area listings for the Asheville, NC and Charlotte, NC, wage areas to read as follows:

Appendix C to Subpart B of Part 532—Appropriated Fund Wage and Survey Areas

* * * * *

NORTH CAROLINA

Asheville

Survey Area

North Carolina:
  Buncombe
  Haywood
  Henderson
  Madison
  Transylvania

Area of Application. Survey area plus:

North Carolina:
  Alexander
  Avery
  Burke
  Caldwell
  Catawba
  Cherokee
  Clay
  Graham
  Jackson
  McDowell
  Macon
  Mitchell
  Polk
  Rutherford
  Swain
  Yancey

* * * * *

Charlotte

Survey Area

North Carolina:
  Cabarrus
  Gaston
  Mecklenburg
  Rowan
  Union

Area of Application. Survey area plus:

North Carolina:
  Anson
  Cleveland
  Iredell
  Lincoln
  Stanly
  Wilkes
South Carolina:
  Chester
  Chesterfield
  Lancaster
  York

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[FR Doc. 2016–20172 Filed 8–23–16; 8:45 am]

BILLING CODE 6325–39–P

DEPARTMENT OF ENERGY

10 CFR Parts 430 and 431

RIN 1904–AD63

[Docket Number EERE–2016–BT–PET–0016]

Energy Conservation Program: Notice of Partial Grant and Partial Denial of Petitions To Amend the Error Correction Rule

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Final rule; partial grant and partial denial of petitions.

SUMMARY: The U.S. Department of Energy ("DOE") is granting in part and denying in part a series of petitions to amend a recently published rule that established a procedure through which a party can, within a prescribed period after DOE posts a rule establishing or amending an energy conservation standard, identify a possible error in such a rule and request that DOE correct the error before the rule is published in the **Federal Register** ("error correction rule"). DOE also provided an

opportunity for the public to comment on these petitions. This document responds to both the petitions and related comments that were submitted and received in accordance with the timelines established in a prior **Federal Register** notice inviting such petitions and comments.

DATES: This partial grant and partial denial is effective September 23, 2016.

ADDRESSES: All petitions and comments filed in accordance with the timelines set forth in the prior **Federal Register** notice have been entered into docket number EERE–2016–BT–PET–0016. The docket is available for review at *http://www.regulations.gov.* For further information on how to review the docket, contact Mr. John Cymbalsky at (202) 287–1692 or by email: *John.Cymbalsky@ee.doe.gov.*

FOR FURTHER INFORMATION CONTACT: Mr. John Cymbalsky, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, EE–5B, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 287–1692 or *John.Cymbalsky@ee.doe.gov.*

SUPPLEMENTARY INFORMATION:

I. Background

The Department of Energy (''DOE'' or the ''Department'') recently published a final rule establishing a procedure through which an interested party can, within a 30-day period after DOE posts a rule establishing or amending an energy conservation standard, identify a possible error in such a rule and request that DOE correct the error before its publication in the **Federal Register**. *See* 81 FR 26998 (May 5, 2016). In that same issue of the **Federal Register**, DOE also invited the public to submit petitions to amend the error correction rule. DOE provided that it would use its best efforts to issue a public document by August 10, 2016, responding to any such petitions submitted by June 6, 2016, and any timely filed comments responding to those petitions. *See* 81 FR 27054 (May 5, 2016).

DOE received four petitions to amend the rule and several comments responding to those petitions. The submitters of these documents, along with their affiliations, are identified in Table 1.

TABLE 1—LIST OF PETITIONERS/COMMENTERS

Petitioners (P)/Commenters (C)	Organization type	Identifier/Acronym
Air Conditioning, Heating and Refrigeration Institute (P, C)	Heating, Ventilation and Air Conditioning (''HVAC'') Industry Trade Organization.	AHRI.
American Gas Association and American Public Gas Association (C).	Energy Industry Trade Organization	AGA–AGPA.
Appliance Standards Awareness Project, Earth Justice, and Natural Resources Defense Council (P, C).	Energy Efficiency Advocates	Joint Advocates.
Association of Home Appliance Manufacturers (C)	Home Appliance Industry Trade Organization	AHAM.
Hussmann Corporation (P, C)	Refrigeration Equipment Manufacturer	Hussmann.
Lennox International (P, C)	HVAC Manufacturer	Lennox.
Traulsen and Kairak (C)	Refrigeration Product and Equipment Manufacturers	Traulsen-Kairak.
Zero Zone (C)	Refrigeration Equipment Manufacturer	Zero Zone.

NOTE: AHAM filed both joint comments with AHRI as well as separate comments on its own behalf.

II. Summary of and Responses to Comments

At the outset, DOE notes that the petitioners agreed with the fundamental underpinnings supporting the basis for the error correction rule. First, the petitioners—AHRI, Hussmann, the Joint Advocates, and Lennox—all agreed with the stated purpose of the error correction rule—that is, to prevent errors from affecting energy conservation standards applicable to consumer products or commercial equipment. AHRI Petition to Amend, EERE–2016–BT–PET–0016–0005, at 1–2; Hussmann Petition to Amend, EERE–2016–BT–PET–0016–0003, at 1; Joint Advocates Petition to Amend, EERE–2016–BT–PET–0016–0006, at 1; and Lennox Petition to Amend, EERE–2016–BT–PET–0016–0004, at 1. They also generally agreed that errors in need of correction are not common, *see* Lennox Petition, No. 0004, at 1 and Joint Advocates Petition, No. 0006, at 1, and that the process laid out in the error correction rule should not be used as a means to revisit and re-argue issues that have already been raised and addressed during the rulemaking process. *See* AHRI Petition, No. 0005, at 1–2 and Lennox Petition, No. 0004, at 1. AHRI and Lennox also acknowledged that applying the error correction process to direct final rules established under 42 U.S.C. 6295(p)(4) was not warranted, assuming that identification of an error would qualify as an ''adverse comment'' for purposes of 6295(p)(4). *See* AHRI Petition, No. 0005, at 10–11 and Lennox Petition, No. 0004, at 4.

While the petitioners agreed with the need and rationale for the error correction rule, they also suggested several changes to the rule. These suggestions are discussed in the following sections.

A. Time Within Which To File an Error Correction Request, Statutory Deadlines

The error correction rule requires that a party must submit a request for correction ''within 30 calendar days of the posting of the rule.'' 10 CFR 430.5(d)(1). The timelines also prescribe a period within which DOE will submit any corrected rule for publication in the **Federal Register**. *See* 10 CFR 430.5(d) through (f). Petitioners and commenters responded to each of these issues.

First, with respect to potential modifications to the rule, each of the industry petitioners asked that DOE consider providing a longer period of time than the 30 days prescribed by the rule within which to submit an error correction request. *See* 81 FR at 27005. The petitioners asserted that because DOE's standards rulemakings are often both complex and lengthy, additional time beyond the prescribed 30 days should be provided to ensure that any errors in the standards final rule are identified to DOE. The suggested timelines from these petitioners ran from 45 days up to 60 days. *See* Hussmann Petition, No. 0003, at 1; Lennox Petition, No. 0004, at 3; and AHRI Petition, No. 0005, at 8. Among these petitioners, one—AHRI—also suggested that DOE consider extending the time period for submitting error correction requests until the effective date of a rule. According to AHRI, extending the period in this way would ''not further delay the effective date of the rule,'' although AHRI also stated that its approach is ''consistent with the

APA power to postpone effective dates.'' AHRI Petition, No. 0005, at 8–9. In AHRI's view, such an option would also be consistent with DOE's prior view of the meaning of the term ''effective date'' and is supported by the fact that a rule is not necessarily effective upon publication in the **Federal Register**. AHRI Petition, No. 0005, at 8–9. AHRI also asserted that the inadequacy of a 30-day review period is recognized in EPCA by virtue of its inclusion of a 60-day period for parties to challenge a final rule establishing an energy conservation standard in court. *Id.* at 8.

Second, the Joint Advocates argued in favor of an exception to the error correction rule when following the rule's timing provisions for review would conflict with statutorily mandated rulemaking deadlines. In their view, case law suggests that there are only limited circumstances when federal agencies can extend statutory deadlines, none of which apply in the case of an error correction rule. In the event it is needed to avoid potential timing conflicts with statutory deadlines, the Joint Advocates suggested that DOE publicly post a draft of a standards final rule once it is transmitted to the Office of Management and Budget for pre-posting review, in order to provide more lead-time for parties to check for errors. Joint Advocates Petition, No. 0006, at 1–2.

Others disagreed with the Joint Advocates' suggestion. *See* Zero Zone, No. 0007, at 1; Lennox, No. 0009, at 2–3; AHRI–AHAM, No. 0012, at 2–5. Zero Zone argued that the Secretary should not be held to an exact time period because it is better to achieve a correct rule through an error correction process than through a court challenge. Zero Zone, No. 0007, at 1. Lennox as well as AHRI and AHAM raised several criticisms of the Joint Advocates' approach. First, they commented that the Joint Advocates' approach would result in prioritizing statutory mandates regarding timing over the statutory mandate providing that DOE may not adopt energy conservation standards unless it finds that the standards are technologically feasible and economically justified. Lennox, AHRI, and AHAM suggest that this statutory conflict should be resolved by prioritizing the correction of errors, particularly because of EPCA's anti-backsliding provision, 42 U.S.C. 6295(o)(1). AHRI and AHAM further stated that this position is supported by case law. *See* AHRI–AHAM, No. 0012, at 3–4. Second, these commenters asserted that rushing to meet a deadline is a type of situation that could lead to rulemaking errors. Third, they warned that not allowing for the correction of errors in a rule could lead to errors resulting in litigation, which could lead to a delay in implementing new standards and result in less energy savings. Fourth, they argued that DOE would be able to manage the competing needs of satisfying any relevant statutorily mandated lead-times and the reviewing period provisions under the error correction rule. Finally, the commenters stated that allowing deadlines to prevail over the error correction process could create an incentive for DOE to delay rulemaking in order to avoid addressing errors. Lennox, No. 0009, at 2–3; AHRI–AHAM, No. 0012, at 2–5.

After further consideration, DOE is extending the amount of time for the submission of error correction requests by 15 additional days—for a total of 45 days after the posting of a final rule. Providing this additional time will better ensure that any potential errors are addressed and corrected prior to the publication of a standards final rule, which will reduce the possibility of promulgating an incorrect energy conservation standard. By taking this step, DOE seeks to increase the likelihood that the public will identify any errors of the types addressed by the error correction rule. Correction of these errors will be beneficial for the reasons discussed in the Final Rule. With respect to providing a longer period of time, such as the 60 days suggested by industry petitioners, in DOE's view, offering a 60-day period as a matter of routine practice for identifying the types of errors addressed by this rule is unnecessary, as these kinds of errors typically can be readily identified well within the time period provided in this rule. DOE also notes that, contrary to AHRI's contention, its approach is consistent with the provision in EPCA that provides entities with 60 days from the date a rule is published in the **Federal Register**[1] to file a petition for review in a court of appeals. Such petitions may address a range of grounds for challenging a final rule, whereas the error correction rule is limited in scope.[2] Accordingly, it should take parties substantially less time to identify errors as defined in the error correction rule and to prepare an error correction request.

AHRI also suggested that DOE extend the period for submitting error correction requests until the effective date of a rule. This suggestion misapprehends the purpose and operation of the error correction rule. AHRI's request, by its nature, would permit error correction requests to be submitted after publication of a rule in the **Federal Register**, because the effective date of a rule necessarily occurs after such publication. But applying the error correction rule to rules that have already been published in the **Federal Register** would make little sense, because the central features of the error correction rule are that DOE delays publishing a rule in the **Federal Register** (for 45 days after posting the rule) to allow for the submission of error correction requests, and that DOE commits to considering properly submitted error correction requests before publishing the rule in the **Federal Register**. After DOE has published a rule in the **Federal Register**, neither outcome is available. As DOE explained in establishing the error correction rule, the anti-backsliding provision in EPCA, 42 U.S.C. 6295(o)(1), makes it particularly important to be able to correct regulatory text before DOE publishes a rule in the **Federal Register**. By contrast, a person submitting an error correction request after publication could just as easily make use of existing statutory mechanisms to ask DOE to amend the published rule. DOE does not see, and AHRI did not explain, why those mechanisms would be inadequate so that a special post-publication error correction process would be warranted.[3]

DOE believes that the pre-publication error correction process set forth in the amended rule is superior to an error correction process permitting the submission of error correction requests during the existing 30-day pre-publication period through the effective date of a rule, which post-dates the publication of a rule in the **Federal Register**. The Joint Advocates argue that ''[e]xtending the error correction process beyond a rule's publication in the **Federal Register** would ignore that DOE lacks the authority to weaken or postpone a standard beyond that point" under 42 U.S.C. 6295(o)(1), EPCA's anti-backsliding provision. Joint Advocates, No. 0013, at 1. If the Joint Advocates are correct, then AHRI's suggestion that DOE extend the time period for submitting error correction requests beyond publication of a rule in the **Federal Register** is obviously unworkable because DOE would be precluded from granting error correction requests unless doing so resulted in more stringent energy conservation standards.

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[1] Henceforward in this document, the words ''published'' and ''publication'' refer to a document being published in the **Federal Register**.

[2] AHRI's request for a reconsideration process that would allow for the consideration of any type of issue with a posted rule is discussed *infra*.

[3] DOE recognizes that because the error correction rule required parties to submit error correction requests within 30 days of a rule's posting (45 days per the amendment described above), while DOE might not publish the rule in the **Federal Register** until later (pursuant to § 430.5(f)), there may, for a given rule, be a period of time in which DOE has not yet published a rule in the **Federal Register** but is not accepting requests under the error correction process. That period is important, because DOE must have some time in which it is able to conclude its consideration of error correction requests and proceed to publish a rule. If DOE committed that it would not publish a rule until it had considered every error correction request submitted before publication—even those submitted well after the 30-day (now 45-day) period—the publication of rules could be significantly delayed. Because compliance dates depend on the dates of publication, that outcome would upset the balance that DOE has struck in committing to a short delay for the sake of correcting errors.

DOE need not, however, decide in this rulemaking whether the Joint Advocates are correct because, even if EPCA and the APA granted DOE the authority to grant any error correction request submitted after the publication of a standards rule in the **Federal Register**, DOE would still decline to adopt AHRI's suggestion that it extend the current 30-day pre-publication period for submitting error correction requests until the effective date of a rule. Contrary to AHRI's assertion (AHRI Petition, No. 0005, at 8), adopting that suggestion would further delay the energy savings benefits of a standards rule where, among other circumstances, DOE decides to change a standards rule in response to an error correction request submitted after publication of a rule in the **Federal Register**. That is so because such a changed rule would need to be published in the **Federal Register**, and EPCA provides that compliance dates must be set a certain period of time after the "publication" of rules in the **Federal Register**. *See* 81 FR at 27,002; *see also supra* note 2. Such a delay is unacceptable, particularly given that DOE has determined that the 45-day period DOE is adopting for the submission of error correction requests is sufficient to permit the public to identify possible errors in its standards rules. Moreover, AHRI's approach would result in substantial uncertainty for the regulated community because manufacturers would not know whether they would be required to conform to standards set forth in rules published in the **Federal Register** until DOE subsequently announced its decision on pending error correction requests. But the very purpose of the EPCA provisions setting compliance dates a certain amount of time after publication of a standard in the **Federal Register** is to provide manufacturers enough time to prepare to implement the new standards. AHRI's suggestion would effectively reduce this period of time in many circumstances (such as where DOE decides, after a rule is published in the **Federal Register**, that it will make no changes to a rule), to the detriment of the regulated community. For all of these reasons, even if DOE could adopt AHRI's suggestion without running afoul of the anti-backsliding provision and other requirements set forth in EPCA and the APA (a question that DOE need not decide), it would not—and does not—adopt that approach.

DOE is also declining to adopt the approach suggested by the Joint Advocates. In DOE's view, ensuring that its energy conservation standards published in the **Federal Register** comport with the judgments DOE has made heavily outweighs the potential costs associated with a modest delay in the **Federal Register** publication of a given standards rule. Moreover, the error correction rule promotes compliance with the statutory mandate that DOE not adopt a standard unless it determines, *inter alia,* that the standard is technologically feasible and economically justified. *See, e.g.,* 42 U.S.C. 6295(o)(2) and 6316(a). By providing the opportunity to file an error correction request to notify DOE of potential errors in the final rule's regulatory text, DOE can more readily identify and correct these errors prior to the rule's publication in the **Federal Register**. An error that could have been identified, if given this opportunity, might otherwise become the basis of a legal challenge that could delay the rule yet further. DOE's error correction process seeks to avoid those legal challenges. In addition, as noted earlier, correcting an error means bringing the regulatory text into harmony with DOE's policy judgment, as reflected in the rest of the rulemaking documents. The resulting regulatory text can be expected to fulfill and balance the multiple goals of EPCA better than the erroneous text would have.

While providing a pre-publication error correction process may require the expenditure of a modest amount of additional time, in DOE's view, weighing the potential energy savings losses of this relatively small delay against the benefits of correcting errors, given that errors, on occasion, can occur, cuts in favor of providing potential error correction requesters with the additional time provided by the error correction rule to review and identify errors to the Secretary.

B. Overly Narrow Definitions

The error correction rule defined a number of terms related to the error correction process. Among these terms were definitions for "Error," "Party," and "Rule." The rule defined "Error" as "an aspect of the regulatory text of a rule that is inconsistent with what the Secretary intended regarding the rule at the time of posting." 10 CFR 430.5(b). That definition also provided three examples of possible mistakes that could give rise to "Errors"—typographical mistakes, calculation mistakes, and numbering mistakes. *See id.* The term "Party" was defined as "any person who has provided input during the proceeding that led to a rule by submitting timely comments (including ex parte communications properly made within the relevant comment period) in response to a notice seeking comment or by providing substantive input at a public meeting regarding the rulemaking." *Id.* Finally, a "Rule" was defined as "a rule establishing or amending an energy conservation standard under the Act." 10 CFR 430.5(b).

Industry petitioners viewed these definitions as overly narrow. First, in their view, the definition for "Error" should be broadened to include not only the regulatory text of a final rule but errors contained within the accompanying Technical Support Document ("TSD") and the final rule's preamble discussion. With respect to TSD-related errors, the petitioners noted that the analysis within the TSD may be needed to help identify potential errors, which would necessitate including these TSD-related errors as part of the error correction rule. Additionally, they noted that new information presented in the preamble should be subject to comment since that information is often intertwined with the regulatory text itself. Lennox argued that errors in the preamble should be included because stakeholders will not have had a prior opportunity to comment on new information presented in the preamble discussion of a final rule. AHRI argued that the definition should be amended to make it objective, not subjective, and that stakeholders cannot guess the "intent" of the Secretary. Furthermore, AHRI expressed concern that a subjective definition could give rise to unfairness if DOE makes "post hoc assertions" about the Secretary's intent that did not in fact exist at the time of the posting of a final rule. *See* AHRI Petition, No. 0005, at 11–13; Lennox Petition, No. 0004, at 5.

Second, some industry petitioners suggested that the rule's definition of the term "Party" was too narrow. *See* Hussmann Petition, No. 0003, at 2; Lennox Petition, No. 0004, at 5–6. In their view, this term should be expanded to include contributors to group responses that are filed as comments during an on-going rulemaking and should not be limited to only the organizations that filed comments responding to a proposal. Lennox stated that an individual's status as a commenter in a rulemaking is irrelevant if the goal of the error correction rule is to correct errors in a given rule. Citing 42 U.S.C. 6305(b), in Lennox's view, the ability to file an error correction request should not hinge on whether a potential error correction requester filed comments in the underlying rulemaking proceeding. It also suggested that both this term and the related requirement that an individual demonstrate how it satisfies the "Party" requirement when submitting an error correction request (*see* 10 CFR 430.5(d)(4)) be dropped from the rule. Lennox Petition, No. 0004, at 5–6.

Finally, the industry petitioners viewed the definition of "Rule" as too narrow. In their view, this term should include rules besides energy conservation standard rulemakings. The petitioners asserted that this term should include test procedure rulemakings in addition to energy conservation standard rulemakings. According to Lennox, test procedure rules are complex and can have an impact on efficiency ratings when intertwined with energy conservation standards. Lennox Petition, No. 0004, at 2–3. In AHRI's view, adding test procedure rules to the definition would promote transparency. It asserted that test procedure rulemakings are intertwined with efficiency standards and contain voluminous, technical data; are often not issued until after, or simultaneously with, efficiency standards; and have the same "real-world effect" as do energy conservation standards. AHRI Petition, No. 0005, at 4–5 n.2 & 7; Lennox Petition, No. 0004, at 2–3. Hussmann suggested that "all rule types" should be included as part of this definition. Hussmann Petition, No. 0003, at 1–2.

Commenters responding to these points largely agreed with the industry petitioners. Most commenters generally agreed with AHRI's criticisms of the definition for "Error." Zero Zone, No. 0007, at 1; AHAM, No. 0008, at 2; Lennox, No. 0009, at 1; AGA–APGA, No. 0010, at 1; Traulsen-Kairak, No. 0011, at 1. Most commenters also agreed that the definition of "Party" is too narrow. Zero Zone, No. 0007, at 1; Lennox, No. 0009, at 2; AGA–APGA, No. 0010, at 1; Traulsen-Kairak, No. 0011, at 1; AHRI–AHAM, No. 0012, at 2. Zero Zone stated that someone seeing the information for the first time might catch errors that someone familiar with the subject might miss. Zero Zone, No. 0007, at 1. Lennox agreed with Hussmann's petition, stating that the definition should be eliminated entirely because the goal of error correction is to detect errors. Lennox, No. 0009, at 2. AHRI and AHAM added that the source reporting an error is irrelevant because the purpose of error correction is to identify errors. AHRI–AHAM, No. 0012, at 2. Most commenters also agreed that the definition of "Rule" is too narrow. Zero Zone, No. 0007, at 1; AHAM, No. 0008, at 2; Lennox, No. 0009 at 1; AGA–APGA, No. 0010, at 2; Traulsen-Kairak, No. 0011, at 1. Zero Zone commented that expanding the definition to include "[a]ll rules and test procedures" would ensure accurate federal documents. Zero Zone, No. 0007, at 1. AHAM echoed AHRI's petition, commenting that the error correction process will be more transparent if the definition is broadened. AHAM, No. 0008, at 2.

DOE is declining to adopt any of the suggested changes to the definitions of "Error" and "Rule," but it is amending the rule in accordance with the suggested changes regarding the rule's definition of "Party." With respect to the definition of "Error," DOE disagrees that the error correction process should be available to correct mistakes that are not in the regulatory text itself. The purpose of the error correction rule is to prevent an erroneous energy conservation standards regulation from being published because after the compliance date, products (or equipment) subject to a standard may not be sold in the United States unless they meet the standard. As a result, errors in the standards adopted in an energy conservation standards rulemaking can have large economic consequences. By contrast, preambles and technical support documents are generally not legally binding in the same way. An error in one of those documents would not have the consequences that an error in the regulatory text might.

DOE does not rule out the possibility that a mistake contained in a preamble, TSD, or other supporting material might lead the resulting regulatory text to be inconsistent with DOE's determinations in the rulemaking. In such a case, a person might properly file an error correction request that pointed out the mistake in the supporting material in the course of identifying the error in the regulatory text. But accepting input, during the brief error correction window, on mistakes in a preamble, TSD, or other supporting document that did not result in errors in the regulatory text would either be pointless (because the error was harmless) or would essentially mean being open to revisiting the entirety of the rulemaking. DOE declines to establish a general procedure, applicable to every standards rulemaking, requiring it to reconsider every aspect of the rulemaking documents. As discussed in this preamble, having such a general reconsideration procedure would create substantially more delay than the error correction rule; and the delay would not be warranted, because DOE would generally adhere to the policy decisions it has already made.

Because the regulatory text forms the basis of what a regulated entity is legally obligated to perform, this aspect of the final rule should, in DOE's view, remain the focus of the error correction process. While DOE acknowledges that there may be potential value in addressing issues that may arise in the context of the preamble discussion or TSD (and related supporting documents), these documents, by themselves, do not impose any legal requirements on the affected regulated entities. And, to the extent that certain information in these documents creates a question regarding the validity of a particular rule, individuals are free to exercise their options under 42 U.S.C. 6306 to seek a remedy to address any applicable issues that would fall outside of the ambit of the error correction rule.

While DOE appreciates the value of ensuring that the preamble discussion and other supporting documents are free from potential errors, DOE emphasizes that, because regulated entities are held accountable for the provisions contained within the regulatory text, it is vital that this aspect of a standards final rule be correct. To the extent that a given preamble discussion warrants further clarification, DOE is willing— and has—provided supplemental guidance regarding its views. As for corrections to erroneous items within a given TSD or related DOE supporting document, DOE may address these types of issues on a case-by-case basis to eliminate any potential confusion that may arise from conflicts between those supporting documents and the final rule's regulatory text.

AHRI also criticized the definition of "Error" as involving an assessment of DOE's "intent" regarding a rule. AHRI urged DOE to adopt a definition of "Error" that is objective. Although AHRI did not suggest an alternative definition, AHRI contends that without some different definition DOE will be encouraged to provide *post hoc* rationalizations if litigation over a rule arises. DOE does not agree that the definition of "Error," as it stands, encourages *post hoc* rationalizations during litigation. In the error correction rule, DOE explained that petitions for judicial review of standards rules should be filed after publication of the rule. Consequently, litigation over a given standards rule would arise, if at all, only after the conclusion of the error correction process.

Moreover, DOE does not agree that because the definition of "Error" refers to what DOE "intended," the concept of "Error" is inherently subjective. Objective conceptions of intent are common in the law. For example, in interpreting a contract, objective manifestations of intent ordinarily prevail over any contrary claims about what one or the other party actually subjectively intended. With respect to the error correction process, the rule states that a claim of error must be based on evidence in the rulemaking record. Thus, the objective evidence in the rulemaking record will ordinarily illustrate whether the regulatory text contained an Error.

Finally, AHRI noted that in some circumstances a person may conclude that a regulation contains an Error but may not be able to determine what the correct version of the regulation should be. DOE acknowledges that such a situation is in principle possible, and the Department's being notified of the potential Error would be valuable even if the submitter could not state what the correction version of the rule should be. Accordingly, DOE is amending paragraph (d)(2)(i) to permit a person to submit an error correction request without stating the correct substitute text, so long as the person states that it is unable to determine the correct text and explains why.

With respect to the definition of "Party," which delineates who can file an error correction request, DOE is adopting the suggestion that the rule should not restrict to commenters alone the opportunity to submit such requests. As the error correction rule explained, DOE believes that individuals who have availed themselves of the opportunity to comment on DOE's standards rulemakings, at public meetings or via written comments, are in the best position to identify potential errors with a given final rule. Those participating individuals who have provided comments to assist the agency in crafting the final rule's standards have demonstrated both the interest and requisite familiarity with the relevant rulemaking and its underlying analyses and data to help DOE in readily identifying errors that may appear in the final rule's regulatory text. However, DOE recognizes that other persons may, on occasion, be able to identify errors. DOE's original decision to define "Party" based on prior participation was based on a desire to avoid the burden of responding to voluminous input from persons who, generally lacking familiarity with a rulemaking, might submit suggestions that were really revisiting the substantive decisions behind the rule rather than error correction requests. In light of the petitions and comments, DOE has become convinced that such improper submissions would probably not be as common as it had thought. A person will likely not undertake the effort to prepare and submit a request during the error correction period without making some assessment that the submission will probably be proper. Improper submissions might occur, of course, but because they would represent unfruitful effort, DOE expects that submitters will try to avoid them. In light of this revised balancing of the considerations related to the term "Party," DOE is dropping the definition and modifying its regulations to reflect that any person may submit an error correction request.

Finally, with respect to which rules would be subject to the error correction rule's provisions, DOE is declining to extend the rule's application beyond rulemakings that establish or amend energy conservation standards. While it is also important to ensure that other rules such as those for test procedures are error-free, DOE has more flexibility to address errors in such rulemakings because there is no question that test procedures can be modified without regard to whether they have already been published or become effective. Accordingly, in DOE's view, while test procedure rulemakings can be complex, potential problems that are discovered in a test procedure's regulatory text can be addressed more readily than with standards rules. DOE also notes that the complexity of test procedure rules, which stems in large part from the very detailed and comprehensive text of the test procedure itself—along with related industry-based testing protocols that are often incorporated by reference—weighs in favor of not including test procedure rulemakings as part of the error correction process. While DOE believes that errors contained in the regulatory text of a standards final rule can be identified within the window prescribed in this rule, the variations in both length and complexity of the regulatory text of test procedures makes the application of this process less workable for these rulemakings. And if a person believed that DOE needed to correct an error discovered in the test procedure, it would be free to file a petition for rulemaking asking DOE to initiate a rulemaking to correct that rule. *See* 5 U.S.C. 553(e).

C. Publication Timing

The error correction rule prescribes a timeline under which DOE will submit a rule to the Office of the Federal Register for publication. If the Secretary determines that a correction is necessary after receipt of a properly filed request, the Secretary will submit a corrected rule for publication in the **Federal Register** within 30 days after the 30-day Request for Correction window (which, as noted above, is being changed to a 45-day window), "absent extenuating circumstances." 10 CFR 430.5(f)(3).

The Joint Advocates objected to the quoted language and argued that the error correction rule should contain a more definitive statement regarding when the corrected rule will be submitted for publication in the **Federal Register**. In their view, DOE's use of the phrase "absent extenuating circumstances" in this context creates an ambiguity with respect to when DOE will submit a corrected rule for publication. The Joint Advocates suggested that DOE either drop this phrase or specify exactly how much time the Secretary will take to submit a corrected rule for publication. *See* Joint Advocates Petition, No. 0006, at 2–3.

Lennox indicated in its comments that DOE cannot foresee every possible error and that the complexity of past DOE rulemaking analyses suggests that more than 30 days may sometimes be needed to resolve a given error correction request. In its view, devoting an additional amount of time in favor of ensuring that a standard is correct is preferable to the alternative of having a permanently flawed standard. Lennox, No. 0009, at 3.

DOE is declining to make any change in response to this part of the Joint Advocates' petition. The language in 10 CFR 430.5(f)(3) was crafted to ensure that DOE could adjust to potential situations where additional time beyond the 30-day period for submitting a corrected rule to the **Federal Register** may be required. While DOE will make every effort to adhere to this 30-day timeline, it is not inconceivable that there may be occasions in which an unexpected delay may occur that would necessitate the need for additional time, such as where an error relates to particularly complex engineering analysis. Having this flexibility will help ensure that DOE has sufficient time to thoroughly review all timely error requests it receives and make any necessary corrections that may be required to the final rule prior to its publication in the **Federal Register**.

D. Clarifying Certain Text

The error correction rule uses the term "posting" to refer to the Secretary's action causing a rule under the Act to be posted on a publicly-accessible Web site. *See* 10 CFR 430.5(c)(1). Related provisions at 10 CFR 430.5(d)(3) and 10 CFR 430.5(f)(3) refer to the Secretary's "issuance" of a rule. Under the former provision, the rule notes that the evidence to substantiate an error correction request or evidence of the error must be in the rulemaking record "at the time of the rule's issuance"; under the latter, the rule indicates that upon receipt of a properly filed correction request "after issuance of a rule," DOE will follow a prescribed timeline for submitting a corrected rule to the **Federal Register** for publication.

The Joint Advocates stated that, based on this definition, DOE should replace "issuance" with "posting" in these two instances in the error correction rule, namely, at 10 CFR 430.5(d)(3) (which describes the point by which evidence supporting an error correction request must be entered into the rulemaking record) and 10 CFR 430.5(f)(3) (which describes the point by which DOE must receive a properly filed error correction request). The Joint Advocates asserted that the term "issuance" means publication in the **Federal Register**, which was not what DOE intended at those instances, but rather "posting." The Joint Advocates suggested that the language be corrected to avoid confusion. Joint Advocates Petition, No. 0006, at 3.

Zero Zone commented that it generally disagreed with the Joint Advocates' Petition. Zero Zone, No. 0007, at 1. AHRI and AHAM commented that they agreed with the Joint Advocates that "issuance" of a final rule does not occur until publication in the **Federal Register**. AHRI–AHAM, No. 0012, at 5.

In response to the petition and comments, DOE is amending its error correction rule to clarify the point by which evidence supporting an error correction request must be in the rulemaking record (10 CFR 430.5(d)(3)) and the point after which a properly filed error correction request is submitted to DOE (10 CFR 430.5(f)(3)). DOE is clarifying that these points are denoted by the posting date of the final rule. Making this change will help ensure that there is no confusion as to when the supporting evidence must be in the rulemaking record and after which a properly filed request is submitted. DOE notes that it is also clarifying 10 CFR 430.5(c)(3) to more clearly indicate that errors must be identified as provided in 10 CFR 430.5 and that DOE may make any necessary corrections in the regulatory text submitted to the Office of the **Federal Register**.

E. Evidence That May Be Relied Upon in Error Correction Requests and the Scope of the Administrative Record That Would Be Filed in Any Court Challenge to a Final Rule

The error correction rule states that to substantiate an error correction request, the evidence relied upon must be evidence that is "in the record of the rulemaking at the time of the rule's issuance, which may include the preamble accompanying the rule. The Secretary will not consider new evidence submitted in connection with the request." 10 CFR 430.5(d)(3). AHRI petitioned to broaden the scope of evidence that the Secretary could consider to include any new evidence. AHRI Petition, No. 0005, at 6. According to AHRI, there is no precedent for excluding "new evidence." *Id.*

In addition, the preamble to the error correction rule stated that DOE "consider[ed] the record with respect to a rule subject to the error correction process [to be] closed upon the posting of the rule." 81 FR at 26999. AHRI construed this sentence to mean that, in the event of a court challenge to a standards rule, no documents postdating the posting of a rule would be included in the administrative record filed in a court of appeals. AHRI Petition, No. 0005, at 9–10. AHRI argued that exclusion of such documents from an administrative record filed in court would be contrary to the Administrative Procedure Act. *Id.*

Industry commenters agreed with AHRI's suggested approach. Zero Zone, No. 0007, at 1; AHAM, No. 0008, at 2; Lennox, No. 0009, at 1; AGA–APGA, No. 0010, at 1; Traulsen-Kairak, No. 0011, at 1. AHRI also commented that the Joint Advocates indirectly supported AHRI's Petition. According to AHRI, when the Joint Advocates stated that a final rule is not "issued" until it is published in the **Federal Register**, their statement supported AHRI's view that the rulemaking record is not yet closed when a rule is "posted." AHRI–AHAM, No. 0012, at 5.

With respect to AHRI's distinct concern about the scope of the administrative record that would be filed in a court of appeals in the event of a challenge to a final standards rule published in the **Federal Register**, DOE notes that it did not intend for the preamble to the error correction rule to make any statements about the contents of such an administrative record. DOE clarifies that an administrative record filed in a court reviewing a final standards rule published in the **Federal Register** would include all documents that are required by law to be part of such a record, including (1) all properly filed error correction requests (including any supporting materials submitted to DOE); (2) DOE's responses to such requests; and (3) the final rule published in the **Federal Register**. DOE believes that this clarification addresses the concerns articulated by AHRI and others that the administrative record not be closed upon the posting of a standards rule. DOE emphasizes, however, that inclusion in the administrative record of supporting materials attached to an error correction request does not mean that DOE must substantively consider such materials. To the contrary, DOE is only obligated to consider such materials if they satisfy all regulatory requirements, including the requirements of Section 430.5(d)(3) discussed in this preamble.

In DOE's view, the posting of an energy conservation standards rule signals the end of DOE's substantive analysis and decision-making regarding the applicable standards. The purpose of the error correction rule is to ensure that the legal requirements that regulated entities will need to meet—as detailed in the regulatory text of a given standards rule—accurately reflect that completed substantive analysis and decision-making. It is not possible for a regulation to be in error, as defined for purposes of the error correction rule, based on evidence first introduced after the substantive decision has been made. Accordingly, such a consideration would be beyond the scope of the error correction process that DOE has developed. It would, essentially, be akin to a request for reconsideration; the submitter would be arguing that, in light of additional evidence, DOE should alter its decision. For the reasons discussed elsewhere in this preamble, DOE declines to expand the scope of the error correction process to encompass requests for reconsideration of its standards rules on any ground.

F. DOE Responses to Error Correction Requests

The error correction rule describes three potential options that could occur after the period for submitting error correction requests expires. *See* 10 CFR 430.5(f). First, if one or more "properly filed requests" are submitted and the Secretary determines that no correction is necessary, the Secretary has discretion on whether to provide a written response. The Secretary may, for example, submit the final rule for **Federal Register** publication as posted, thereby effectively denying any requests. *See* 10 CFR 430.5(f)(1). Second, if no properly filed requests are submitted and the Secretary does not identify any errors, the Secretary will submit the final rule for publication as it was posted. *See* 10 CFR 430.5(f)(2). Finally, if the Secretary receives a properly filed request and determines that a correction is necessary, the Secretary will submit the final rule for publication with the correction included. *See* 10 CFR 430.5(f)(3).

Several petitioners stated that DOE should provide a public response to requests for correction, regardless of whether the Secretary deems that any correction is merited. Hussmann Petition, No. 0003, at 1; Lennox Petition, No. 0004, at 4; AHRI Petition, No. 0005, at 10. Hussmann stated that DOE should do so, either before or at the time of publication of a final rule in the **Federal Register**. Hussmann Petition, No. 0003, at 1. Lennox and AHRI stated that providing a response will promote transparency and should not take much additional time for DOE to prepare, assuming that DOE already analyzed any requests. Lennox Petition, No. 0004, at 4; AHRI Petition, No. 0005, at 10. Lennox added that rejecting an error correction request through a non-response is not acceptable because petitioners incur real costs when submitting a request. Lennox Petition, No. 0004, at 4.

Related to the Secretary's options under 10 CFR 430.5(f), petitioners made reference to a statement in the preamble to the error correction rule under the "Publication in the **Federal Register**" section. In particular, DOE indicated that there may be instances where DOE "may choose not to correct the regulation because it concludes the regulatory text is nonetheless acceptable; for instance, because it considers the error insignificant." 81 FR at 27002. Both Lennox and AHRI stated that, especially when an error is considered "insignificant" by the Secretary, DOE should provide a public response not only to promote transparency but also to reduce subsequent litigation. AHRI argued that DOE should furnish a rationale or justification explaining why an error is deemed to be insignificant, while Lennox asserted that if DOE is mistaken about an error being insignificant and does not publish a response, the absence of a response could lead "to unintended actions by stakeholders, including the exploitation of perceived loopholes." Lennox Petition, No. 0004, at 4; AHRI Petition, No. 0005, at 10.

Most commenters generally agreed with the petitioners who urged DOE to provide a public response to requests for error correction, including when DOE deems an error to be "insignificant." Zero Zone, No. 0007, at 1; AHAM, No. 0008, at 2; Lennox, No. 0009, at 1; AGA–APGA, No. 0010, at 2; Traulsen-Kairak, No. 0011, at 1.

After giving careful consideration to this issue, DOE has decided to make public brief written indications of its handling of all properly-filed error correction requests. DOE will ordinarily summarize these indications in a single document. In DOE's view, the vast majority of cases in which it grants an error correction request are likely to involve a request that DOE correct a typographical error that appears in a posted, pre-publication version of a rule. In such cases, DOE's written indication addressing the request may note only that DOE made the requested change because the reason for the change may be readily apparent to the public. When requesters have sought to identify a potential error in a posted standards rule and DOE has decided not to make the requested change, an explanation as to why that correction request has not been adopted will usually be helpful in assisting the public with understanding DOE's reasoning, and DOE will provide a brief explanation in those circumstances. Accordingly, DOE is modifying the regulatory text under 10 CFR 430.5(f) to include a provision indicating that DOE will make available a brief written statement indicating the agency's treatment of the error correction requests it received. DOE expects to make such a statement available at around the same time it publishes the rule.

G. Notice and Comment

In a separately filed comment, AHAM asked that the error correction final rule be treated as a proposed rule. It further asked that, upon granting the petition from AHRI, DOE seek stakeholder input in order to ensure that the next version of the error correction process does not suffer from the same deficiencies as the first version. AHAM Comments, No. 0008, at 2.

As an initial matter, DOE notes that the error correction rule was published as a final rule and has already taken effect. Moreover, DOE is not required to provide the public with an opportunity to comment on the error correction rule or any amendments to that rule because it is a rule of agency procedure and practice. *See* 5 U.S.C. 553(b)(A). However, as indicated elsewhere in this document, DOE is amending the error correction rule in part to address some of the suggestions offered by both petitioners and commenters. Accordingly, interested members of the public have been afforded the opportunity to provide input into shaping the final version of the error correction rule being adopted in this document.

H. Response to Petitions Seeking Full Reconsideration Procedures

AHRI's principal request is for DOE to replace the error correction rule with a process that "provide[s] for the posting of a pre-publication version of final rules under 42 U.S.C. 6293 and 6295 (and the corresponding provisions applicable to commercial equipment, sections 6313 and 6314) for a period of 60 days and allow[s] petitions for reconsideration under the APA during that prepublication period." AHRI Petition, No. 0005, at 2–3. Embedded in this request, it appears, are the following five suggested changes to the current error correction rule, all of which AHRI also separately requests, in the alternative, in the event that DOE denies its principal request: (1) Broaden the types of arguments that may be asserted in error correction requests to encompass any grounds for changing a rule, not just arguments identifying an "error" as defined in the current rule, *id.* at 3–6; (2) allow the introduction of evidence that is not in the rulemaking record to support error correction requests, *id.* at 6; (3) expand the error correction process to include errors appearing in Technical Support Documents and perhaps other parts of the regulatory record, *id.* at 12–13; (4) expand the error correction process to include rules establishing test procedures, *id.* at 7–8; and (5) extend the 30-day period for submitting error correction requests (prior to publication in the **Federal Register**) to 60 days (also prior to publication in the **Federal Register**),[4] *id.* at 8–9. Lennox supported AHRI's principal request, as did other industry commenters. *See* Lennox Petition, No. 0004, at 2 (supporting "a 60 day pre-publication period" for "Petitions for Reconsideration, as provided for under the [APA]"); AGA–APGA, No. 0010, at 1–2 (supporting pre-publication "petitions for reconsideration, as provided for under the [APA]'' and including ''the full range of reconsideration petitions that the APA contemplates''); AHRI–AHAM, No. 0012, at 5 (reiterating AHRI's view that ''many of the main purposes articulated in the Final Rule are best met by allowing for a 60-day pre-publication period in which Petitions for Reconsideration, as provided for under the [APA], will be considered'').

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[4] AHRI's request in the alternative pertaining to timing also argues that DOE could instead allow error correction requests to be submitted during the existing 30-day pre-publication period and continuing until the effective date of the rule, which follows publication in the **Federal Register**. AHRI Petition, No. 0005, at 8–9; *see also* AGA–APGA, No. 0010, at 2.

DOE has explained above why it is rejecting (in part) AHRI's second through fifth requests embedded in its principal suggestion. For the reasons explained below, DOE also rejects AHRI's first request embedded in its principal suggestion (and offered as a standalone request)—that DOE expand the error correction process to encompass requests alleging any grounds for changing a rule.

DOE understands that the ''full'' reconsideration procedure that AHRI describes in its principal request, as well as in item 1 under its alternative request, would encompass the full range of issues germane to a given rulemaking. DOE has considered whether to adopt a reconsideration procedure along the lines suggested by AHRI. Given the practical implications of crafting an error correction process that would allow for full reconsideration of any factual or legal issue implicated by the rulemaking, as discussed in this preamble, DOE declines to broaden the error correction rule to permit petitions asserting any ground for changing a rule.

As AHRI acknowledges, energy conservation rulemakings are an ''enormous undertaking . . . in terms of time, effort and cost, both on the part of stakeholders and DOE.'' AHRI Petition, No. 0005, at 2. In addition, these rulemakings tend to involve an extensive opportunity for comment, both through written submissions in response to notices of proposed rulemaking and notices releasing additional technical information, as well as through oral participation at public meetings held by DOE. Adding a full reconsideration process, in which the Department would specifically review a further round of comment on any matter, would substantially increase the cost of energy conservation rulemakings and the length of time they take. *See* Lennox Petition, No. 0004, at 5 (acknowledging that it is ''important to bring finality to a given rulemaking''). Meanwhile, in DOE's view, given the opportunities for public input that the process already provides, a mandatory general reconsideration period covering all topics would, in many instances, not significantly increase meaningful public participation in rulemakings.

By contrast, DOE developed the error correction rule to invite public input on a narrow but challenging category of problems, namely errors that may occur in formulating the text of regulations and that, if left uncorrected, could result in standards that would be binding on regulated parties but would not accurately reflect DOE's judgment about the appropriate standard level. Obtaining public input on ''errors'' as defined by the rule is particularly valuable because, by their nature, such errors are inadvertent, and thus DOE is unaware of them. In addition, the narrow error correction rule helps avoid the possibility that DOE might inadvertently adopt an energy conservation without having determined that it meets the statutory standards. That is so because many ''errors'' (as defined by the error correction rule) may, if uncorrected, result in the promulgation of standards that DOE did not intend to adopt. For example, if DOE's calculations in the preamble to a final rule suggested that the standard for a given product should be set at one level, but a more stringent standard was inadvertently presented in the regulatory text, that standard would not have been the one DOE intended to adopt as being technologically feasible and economically justified. By contrast, a request to change a rule on a ground other than the identification of an ''error'' (as defined by the error correction rule) does not raise the possibility that DOE adopted a standard in the regulatory text without determining that it was technologically feasible and economically justified. Moreover, reviewing and responding to requests to correct errors as defined in the error correction rule should not be too burdensome because DOE will need to review only a limited scope of materials for each submission. Thus, the error correction rule is specifically tailored to address what the agency views as a critical class of inadvertent errors warranting the creation of an additional limited administrative process apart from the procedures already afforded by EPCA and the APA.

In contrast, the full reconsideration process that AHRI suggests is not closely tailored to address this key problem and would represent a commitment by DOE to revisiting the entire rulemaking record in order to assess the particulars of any issue a person might raise in a reconsideration request. Because of the open-ended nature of such a process, DOE would need to provide interested persons with a period of time to submit reconsideration petitions that is longer than the 45-day period established by the error correction rule (as amended in this document). In addition, it would take DOE significantly more time to consider such petitions and to determine whether to change the rule in response to the petitions. Furthermore, DOE's preparation and issuance of a written response to any such reconsideration requests, as suggested by industry petitioners, would extend the process further. *See* AHRI Petition, No. 0005, at 3.

DOE declines to extend its rulemaking procedures in that fashion. Many standards-setting rules are subject to a statutory deadline. *See, e.g.,* 42 U.S.C. 6295(m)(1) (DOE must determine whether to amend an energy conservation standard for consumer products not later than six years after issuance of a final rule establishing or amending a standard); 42 U.S.C. 6295(m)(3)(A) (under which DOE must issue a rule within two years of the notice of proposed rulemaking for an amended standard); *see also* 42 U.S.C. 6316 (applying section 6295(m), including its two-year window, to a variety of industrial equipment-related energy conservation standards, including (1) electric motors and pumps, (2) commercial refrigerators, freezers, and refrigerator-freezers, (3) automatic commercial ice makers, (4) walk-in coolers and walk-in freezers, and (5) commercial clothes washers). Given the complexity of these rulemakings, these statutory deadlines are difficult to meet in current circumstances, which include considerable periods of time that lie outside of DOE's control. Trying to fit a broad reconsideration process within these already limited time periods would be even more difficult. The broader the issues available for review through an administrative reconsideration process, the greater the strain on departmental resources and the agency's ability to complete its portfolio of rulemaking proceedings within statutory deadlines. *See* Joint Advocates Petition, No. 0006, at 1–2. In addition, DOE takes the timelines in EPCA as signals of congressional concern that standards rulemakings should not be unnecessarily delayed. As the preamble to the error correction rule observed, postponing the publication of a standards rule in the **Federal Register** means delaying the benefits to consumers and to the economy that the new standard will achieve; and it prolongs the uncertainty for manufacturers about what the standard will eventually be. Accordingly, in

DOE's view, the benefits AHRI attributes to a full reconsideration option are limited and outweighed by the delay and resource strain that would follow from the implementation of such a reconsideration process.

DOE also finds unpersuasive AHRI's argument that DOE must entertain pre-publication petitions for reconsideration alleging any grounds for changing a rule because "5 U.S.C. 553(e) does not limit the grounds on which reconsideration can be pursued." AHRI Petition, No. 0005, at 5. Reliance on section 553(e) is inapposite here because DOE is not establishing the error correction process under this section. Through the error correction rule, DOE established a new procedure in addition to and independent of any statutory rights to petition for rulemaking afforded to persons under the APA and EPCA. *See* 5 U.S.C. 553(e) ("Each agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule."); 42 U.S.C. 6295(n) ("[A]ny person may petition the Secretary to conduct a rulemaking to determine for a covered product if the standards contained either in the last final rule required under subsections (b) through (i) of this section or in a final rule published under this section should be amended."). To the extent that those authorities permit the filing of petitions seeking to change a rule, that option remains available to the public and is not superseded or limited by the error correction rule in any way. Thus, contrary to AHRI's position, DOE is not required by any statutory, regulatory, or other requirement to broaden the error correction procedure to encompass any ground for changing a standards rule. It is in DOE's sole discretion to determine the scope of the error correction procedure, and, for the reasons described in this preamble, the Department has reasonably concluded that this process should be limited to "errors" as defined in the rule. *See Vermont Yankee Nuclear Power Corp.* v. *NRDC,* 435 U.S. 519, 543–44 (1978) ("Absent constitutional constraints or extremely compelling circumstances the 'administrative agencies "should be free to fashion their own rules of procedure and to pursue methods of inquiry capable of permitting them to discharge their multitudinous duties."'") (internal citations omitted).

In its petition to amend the error correction rule, AHRI refers back to certain arguments raised in its brief to the Fifth Circuit in *Lennox Int'l, Inc.* v. *U.S. Dep't. of Energy,* No. 14–60535, concerning AHRI's underlying July 30, 2014 Petition for Reconsideration of DOE's Rule for Walk-In Coolers and Freezers (WICFs), Docket No. EERE–2010–BT–STD–0003, and AHRI argues that DOE must respond to those legal arguments here in order to determine whether the pre-publication error correction process should be broadened to encompass requests to change a posted rule on any ground. *See* AHRI Petition, No. 0005, at 5 (contending that DOE wrongly "expressed the view in denying [reconsideration of] the walk in cooler/freezer rule that it lacked the power to grant reconsideration petitions"); *see also id.* (arguing that "DOE must . . . set[] out its current position as to what [*Natural Resources Defense Council* v. *Abraham,* 355 F.3d 179 (2d Cir. 2004),] says about DOE's EPCA reconsideration powers"). However, the relevant parts of DOE's denial of the petition for reconsideration of the Walk-In Coolers and Freezers Rule and AHRI's subsequent Fifth Circuit brief dealt solely with the issue of DOE's authority to grant petitions for reconsideration filed after publication of a rule in the **Federal Register** and before its effective date. The legal arguments raised in that context have no bearing on the validity of DOE's rule establishing a process for correcting errors before publication in the **Federal Register**. Moreover, even if AHRI is correct that DOE has the authority to consider reconsideration petitions submitted after a rule is published in the **Federal Register**, it does not follow that DOE should expand the pre-publication error correction process to encompass petitions alleging any ground as a basis for changing a posted rule, which is a distinct question. Accordingly, DOE declines in this rulemaking to definitively resolve the legal arguments AHRI advanced in its Fifth Circuit brief regarding DOE's authority to consider petitions for reconsideration submitted after a rule is published in the **Federal Register**.

AHRI argued in its Fifth Circuit brief in *Lennox* that 42 U.S.C. 6295(o)(1)—which provides that DOE may not prescribe any amended standard that "increases the maximum allowable energy use . . . or decreases the minimum required energy efficiency" of a product—does not prevent DOE from reconsidering EPCA standards to make them less stringent when reconsideration is sought after publication in the **Federal Register** but before the effective date of the relevant rule. *See* AHRI Brief in *Lennox,* at 28–38. *But see Natural Resources Defense Council* v. *Abraham,* 355 F.3d 179 (2d Cir. 2004) (interpreting section 6295(o)(1) as applying as of **Federal Register** publication of a standards rule); Joint Advocates, No. 0013, at 1 (same). As the preamble to the error correction rule noted, section 6295(o)(1) does not unambiguously indicate the relevant reference point (*e.g.,* a publication in the **Federal Register**) for determining the "maximum allowable energy use" and the "minimum required energy efficiency." 81 FR at 27002.

However, because DOE has established a pre-publication error correction procedure, DOE can leave for another day the questions AHRI has raised about DOE's authority to reconsider rules that have already been published in the **Federal Register**. That is so because, regardless of whether section 6295(o)(1) bars DOE from considering some or all reconsideration petitions submitted after **Federal Register** publication, section 6295(o)(1) does not bar DOE from correcting errors prior to publication in the **Federal Register**. *See* 81 FR 26998, 27002–27003 (May 5, 2016) (discussing § 430.5(g) of the error correction rule and why pre-publication error correction requests do not implicate EPCA's anti-backsliding provision).[5] Indeed, neither AHRI nor any other petitioner or commenter has contended that the error correction rule is inconsistent with section 6295(o)(1).[6]

Similarly, AHRI's Fifth Circuit brief in *Lennox* argued that 42 U.S.C. 6295(n) does not bar DOE from making a standards rule less stringent in response to a petition for reconsideration filed after the rule was published in the **Federal Register** but before the effective date of the relevant rule. *See* AHRI Brief in *Lennox,* at 39–41. Section 6295(n), which addresses "[p]etition[s] for amended standards," applies to "petition[s] . . . to conduct a rulemaking to determine . . . if the standards contained either in the last final rule required under [42 U.S.C.

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[5] To the extent that the preamble to the error correction rule could be construed as having definitively taken a position on whether the anti-backsliding provision is triggered by publication of final rule in the **Federal Register**, *see* 81 FR at 27002, DOE now clarifies that it meant to express the more limited proposition that the anti-backsliding provision permits the pre-publication correction of errors in the manner that the error correction rule establishes.

[6] AHRI "note[s]" that "it would [be] just as consistent with DOE's construction of [section 6295(o)(1)] for DOE to allow for a process for full reconsideration (to any degree, of any aspect) of an energy conservation standard, as contrasted with the limited scope of the error correction rule"—*i.e.,* to allow pre-publication petitions seeking to change a standards rule on any ground. AHRI Petition, No. 0005, at 6 (internal quotation marks omitted). Nonetheless, it is within DOE's discretion to determine the scope of the error correction procedure, and DOE has reasonably concluded that the procedure should be limited to "errors" as defined in the rule.

6295(b)–(i)] or in a final rule published under [section 6295] should be amended.'' DOE need not, however, resolve the question raised in the *Lennox* briefs of whether section 6295(n) applies to post-publication reconsideration petitions because, regardless of whether section 6295(n) applies to such petitions, 42 U.S.C. 6295(n) is not implicated by the pre-publication error correction procedures established under the error correction rule.

That conclusion follows from the text of section 6295(n). DOE has, for the most part, already published the ''last final rule[s] required'' by subsections (b) through (i) of section 6295. Thus, for nearly all new standards rules for consumer products and for any standards applicable to commercial equipment, a petition under section 6295(n) would be submitted under the second clause of that subsection, applicable to ''published'' rules. Regardless which clause of 6295(n) may be the basis for a rule (*i.e.,* the ''required'' rules clause or the ''published'' rules clause), DOE interprets that provision to apply no earlier than the date a rule is published in the **Federal Register**. Because error correction requests submitted pursuant to the error correction rule seeking to change a standard in a rule posted on DOE's Web site based on an ''error'' are filed before the rule is published in the **Federal Register**, such requests do not qualify as section 6295(n) petitions. Section 6295(n) thus is irrelevant to whether DOE may consider and grant any given error correction request, and no petitioner or commenter (including AHRI) has argued to the contrary.[7]

As explained in this preamble, DOE has fully considered but is declining to adopt the full reconsideration procedure that AHRI suggests—irrespective of what DOE's legal authority to accept a post-publication petition would be. Because resolution of those legal arguments is not determinative of DOE's basis for rejecting a full reconsideration procedure in the matter at hand, DOE declines to definitively resolve the questions AHRI raises about the Department's authority to reconsider rules that have already been published in the **Federal Register** and is reserving judgment until a more appropriate time on whether and, if so, to what extent it possesses the legal authority to create a reconsideration procedure after a rule's publication in the **Federal Register**. The Department notes, however, that, regardless of the exact point in time when the anti-backsliding provision in section 6295(o)(1) and the amendment provision in section 6295(n) are triggered so as to have an impact on reconsideration requests, as DOE reads the provisions, they do not restrict DOE's correction of rules pursuant to the error correction process it has established. As such, DOE's error correction rule is consistent with both EPCA and the rationale expressed by DOE in its order denying AHRI's petition for reconsideration in the WICF rulemaking.

It is DOE's position that a process to correct errors such as typographical mistakes or calculation errors can be resolved at the administrative level without causing an undue burden on agency resources or the agency's ability to comply with statutory deadlines. The error correction rule, as amended, reflects DOE's balancing between the resource-intensive rulemaking process and its ability to offer an additional administrative process to stakeholders that will reduce the need to pursue judicial review in instances where it is clear that the relevant standard in the posted rule is not the standard the agency had intended to select.

DOE has carefully considered petitioners' request for a full reconsideration procedure but concludes that agency and stakeholder interests will be best served by a streamlined process for correcting the errors described in the amended error correction rule.[8]

III. Procedural Issues and Regulatory Review

A. Administrative Procedure Act

This rule of agency procedure and practice is not subject the requirement to provide prior notice and an opportunity for public comment pursuant to authority at 5 U.S.C. 553(b)(A). The Administrative Procedure Act's exception to the notice-and-comment rulemaking requirement for rules of agency procedure and practice reflects Congress's judgment that such rules typically do not significantly benefit from notice-and-comment procedures, and that judgment is particularly applicable here, where the agency perceives no specific need for notice and comment. In addition, DOE has concluded that seeking further input on this rule—beyond that which has already been provided through the submitted petitions to amend and comments responding to them—would inappropriately divert valuable agency resources from other rulemakings that Congress has directed DOE to complete according to certain statutory timelines.

This rule is also not a substantive rule subject to a 30-day delay in effective date pursuant to 5 U.S.C. 553(d).

B. Review Under Executive Orders 12866 and 13563

This regulatory action is not a ''significant regulatory action'' under section 3(f) of Executive Order 12866. Accordingly, this action was not subject to review under that Executive Order by the Office of Information and Regulatory Affairs (''OIRA'') of the Office of Management and Budget (''OMB''). DOE has also reviewed this regulation pursuant to Executive Order 13563, issued on January 18, 2011. 76 FR 3281 (January 21, 2011). EO 13563 is supplemental to and explicitly reaffirms the principles, structures, and definitions governing regulatory review established in Executive Order 12866. As a result, EO 13563 also does not apply to this rule.

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[7] Accordingly, DOE rejects AHRI's argument that it ''must reject the 42 U.S.C. 6295(n) rationale it adopted'' when it denied reconsideration of the WICF rule. AHRI Petition, No. 0005, at 6. As explained in this document, 42 U.S.C. 6295(n) plainly does not apply to pre-publication error correction requests, and there is no need to substantively resolve in this rulemaking whether it applies to post-publication reconsideration petitions like the petition filed with respect to the WICF rule.

For similar reasons, DOE rejects AHRI's suggestion that it must substantively resolve the argument AHRI advanced in its *Lennox* brief that DOE ''acted inconsistently with its own action on prior reconsideration petitions'' when it denied reconsideration of the WICF rule on the ground that it lacked authority to consider that petition. AHRI Petition, No. 0005, at 5. The alleged inconsistency concerns DOE's handling of reconsideration petitions submitted *after* rules are published in the **Federal Register**. *See* id. at 5 & n.3 (citing DOE's actions on reconsideration petitions submitted after rules were published in the **Federal Register**). As explained above, there is no need to substantively resolve in this rulemaking how DOE responds to such post-publication reconsideration petitions. DOE's response to the submission at issue in the *Lennox* case nowhere suggested that DOE would be unable to establish a mechanism like the error correction process, as an exercise of its authority to engage in administrative and procedural rulemaking regarding its implementation of EPCA.

[8] AHRI asserts various arguments about how DOE must respond to its petition to amend the error correction rule under two settlement agreements in *Lennox Int'l, Inc.* v. *U.S. Dep't of Energy,* No. 14–60535 (5th Cir.). *See* AHRI Petition, No. 0005, at 2–5. DOE has complied with both settlement agreements because, *inter alia,* this document responding to petitions to amend the error correction rule ''address[es]'' AHRI's request that DOE ''consider establishing a process for full reconsideration (to any degree, of any aspect) of an energy conservation standard.'' Joint Motion Embodying Further Settlement Agreement of All Parties for Dismissal Without Prejudice, *Lennox Int'l Inc.* v. *U.S. Dep't of Energy,* No. 14–60535 (5th Cir.) (filed April 28, 2016). Indeed, for the reasons identified in this document, DOE declines to adopt AHRI's principal suggestion for expanding the error correction rule, and DOE also rejects AHRI's related request that parties be permitted to assert any grounds for changing a rule in their error correction requests.

C. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601, *et seq.*) requires preparation of an initial regulatory flexibility analysis ("IRFA") for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. Because this rule is not subject to the requirement to provide prior notice and an opportunity for public comment, it is not subject to the analytical requirements of the Regulatory Flexibility Act.

D. Review Under the Paperwork Reduction Act

This rule does not contain a collection of information for purposes of the Paperwork Reduction Act.

E. Review Under the National Environmental Policy Act of 1969

DOE has determined that this rule falls into a class of actions that are categorically excluded from review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and DOE's implementing regulations at 10 CFR part 1021. Specifically, this rule is strictly procedural and is covered by the Categorical Exclusion in 10 CFR part 1021, subpart D, paragraph A6. Accordingly, neither an environmental assessment nor an environmental impact statement is required.

F. Review Under Executive Order 13132

Executive Order 13132, "Federalism," 64 FR 43255 (August 10, 1999), imposes certain requirements on Federal agencies formulating and implementing policies or regulations that preempt State law or that have Federalism implications. The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE examined this final rule and determined that it will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. EPCA governs and prescribes Federal preemption of State regulations as to energy conservation for the equipment that are the subject of this final rule. States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297(d)) No further action is required by Executive Order 13132.

G. Review Under Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, "Civil Justice Reform," imposes on Federal agencies the general duty to adhere to the following requirements: (1) Eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; and (3) provide a clear legal standard for affected conduct rather than a general standard and promote simplification and burden reduction. 61 FR 4729 (February 7, 1996). Section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, this rule meets the relevant standards of Executive Order 12988.

H. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 ("UMRA") requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. Public Law 104–4, sec. 201 (codified at 2 U.S.C. 1531). For a regulatory action resulting in a rule that may cause the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of $100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)) The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and Tribal governments on a proposed "significant intergovernmental mandate," and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect small governments. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820; also available at *http://energy.gov/gc/office-general-counsel.* DOE examined this final rule according to UMRA and its statement of policy and determined that the rule contains neither an intergovernmental mandate, nor a mandate that may result in the expenditure of $100 million or more in any year, so these requirements do not apply

I. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105–277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This rule will not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

J. Review Under Executive Order 12630

DOE has determined, under Executive Order 12630, "Governmental Actions and Interference with Constitutionally Protected Property Rights," 53 FR 8859 (March 18, 1988), that this regulation would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

K. Review Under the Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516, note) provides for Federal agencies to review most disseminations of information to the public under guidelines established by each agency pursuant to general guidelines issued by OMB. OMB's guidelines were published at 67 FR 8452 (February 22, 2002), and DOE's guidelines were published at 67 FR 62446 (October 7, 2002). DOE has reviewed this final rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

L. Review Under Executive Order 13211

Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to OIRA at OMB, a Statement of Energy Effects for any significant energy action. A "significant energy action" is defined as any action by an agency that promulgated or is expected to lead to promulgation of a final rule, and that: (1) Is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (3) is designated by the Administrator of OIRA as a significant energy action. For any significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use if the regulation is implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

This final rule is not a significant energy action because the ability to correct regulations will not, in itself, have a significant adverse effect on the supply, distribution, or use of energy. Moreover, it would not have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as a significant energy action by the Administrator of OIRA. Therefore, it is not a significant energy action, and, accordingly, DOE has not prepared a Statement of Energy Effects.

M. Congressional Notification

As required by 5 U.S.C. 801, DOE will report to Congress on the promulgation of this rule before its effective date. The report will state that it has been determined that the rule is not a "major rule" as defined by 5 U.S.C. 804(2).

IV. Approval of the Office of the Secretary

List of Subjects

10 CFR Part 430

Administrative practice and procedure, Energy conservation test procedures, Household appliances.

10 CFR Part 431

Administrative practice and procedure, Energy conservation test procedures, Commercial and industrial equipment.

Issued in Washington, DC, on August 10, 2016.

Kathleen B. Hogan,

Deputy Assistant Secretary for Energy Efficiency, Energy Efficiency and Renewable Energy.

For the reasons set forth in the preamble, DOE amends parts 430 and 431 of chapter II of title 10 of the Code of Federal Regulations as set forth below:

PART 430—ENERGY CONSERVATION STANDARDS FOR CONSUMER PRODUCTS

■ 1. The authority citation for part 430 continues to read as follows:

Authority: 42 U.S.C. 6291–6309; 28 U.S.C. 2461 note.

■ 2. Section 430.5 is revised to read as follows:

§ 430.5 Error correction procedures for energy conservation standards rules.

(a) *Scope and purpose.* The regulations in this section describe procedures through which the Department of Energy accepts and considers submissions regarding possible Errors in its rules under the Energy Policy and Conservation Act, as amended (42 U.S.C. 6291–6317). This section applies to rules establishing or amending energy conservation standards under the Act, except that this section does not apply to direct final rules issued pursuant to section 325(p)(4) of the Act (42 U.S.C. 6295(p)(4)).

(b) *Definitions.*

Act means the Energy Policy and Conservation Act of 1975, as amended (42 U.S.C. 6291–6317).

Error means an aspect of the regulatory text of a rule that is inconsistent with what the Secretary intended regarding the rule at the time of posting. Examples of possible mistakes that might give rise to Errors include:

(i) A typographical mistake that causes the regulatory text to differ from how the preamble to the rule describes the rule;

(ii) A calculation mistake that causes the numerical value of an energy conservation standard to differ from what technical support documents would justify; or

(iii) A numbering mistake that causes a cross-reference to lead to the wrong text.

Rule means a rule establishing or amending an energy conservation standard under the Act.

Secretary means the Secretary of Energy or an official with delegated authority to perform a function of the Secretary of Energy under this section.

(c) *Posting of rules.* (1) The Secretary will cause a rule under the Act to be posted on a publicly-accessible Web site.

(2) The Secretary will not submit a rule for publication in the **Federal Register** during 45 calendar days after posting the rule pursuant to paragraph (c)(1) of this section.

(3) Each rule posted pursuant to paragraph (c)(1) of this section shall bear the following disclaimer:

NOTICE: The text of this rule is subject to correction based on the identification of errors as defined in 10 CFR 430.5 before publication in the **Federal Register**. Readers are requested to notify the United States Department of Energy, by email at [EMAIL ADDRESS PROVIDED IN POSTED NOTICE], of any typographical or other errors, as described in such regulations, by no later than midnight on [DATE 45 CALENDAR DAYS AFTER DATE OF POSTING OF THE DOCUMENT ON THE DEPARTMENT'S WEBSITE], in order that DOE may make any necessary corrections in the regulatory text submitted to the Office of the Federal Register for publication.

(d) *Request for correction.* (1) A person identifying an Error in a rule subject to this section may request that the Secretary correct the Error. Such a request must be submitted within 45 calendar days of the posting of the rule pursuant to paragraph (c)(1) of this section.

(2)(i) A request under this section must identify an Error with particularity. The request must state what text is claimed to be erroneous. The request must also provide text that the requester argues would be a correct substitute. If a requester is unable to identify a correct substitute, the requester may submit a request that states that the requester is unable to determine what text would be correct and explains why the requester is unable to do so. The request must also substantiate the claimed Error by citing evidence from the existing record of the rulemaking that the text of the rule as issued is inconsistent with what the Secretary intended the text to be.

(ii) A person's disagreement with a policy choice that the Secretary has made will not, on its own, constitute a valid basis for a request under this section.

(3) The evidence to substantiate a request (or evidence of the Error itself) must be in the record of the rulemaking

at the time of the rule's posting, which may include the preamble accompanying the rule. The Secretary will not consider new evidence submitted in connection with a request.

(4) A request under this section must be filed in electronic format by email to the address that the rule designates for correction requests. Should filing by email not be feasible, the requester should contact the program point of contact designated in the rule regarding an appropriate alternative means of filing a request.

(5) A request that does not comply with the requirements of this section will not be considered.

(e) *Correction of rules.* The Secretary may respond to a request for correction under paragraph (d) of this section or address an Error discovered on the Secretary's own initiative by submitting to the Office of the Federal Register either a corrected rule or the rule as previously posted.

(f) *Publication in the **Federal Register***. (1) If, after receiving one or more properly filed requests for correction, the Secretary decides not to undertake any corrections, the Secretary will submit the rule for publication to the Office of the Federal Register as it was posted pursuant to paragraph (c)(1) of this section.

(2) If the Secretary receives no properly filed requests after posting a rule and identifies no Errors on the Secretary's own initiative, the Secretary will in due course submit the rule, as it was posted pursuant to paragraph (c)(1) of this section, to the Office of the Federal Register for publication. This will occur after the period prescribed by paragraph (c)(2) of this section has elapsed.

(3) If the Secretary receives a properly filed request after posting a rule pursuant to (c)(1) and determines that a correction is necessary, the Secretary will, absent extenuating circumstances, submit a corrected rule for publication in the **Federal Register** within 30 days after the period prescribed by paragraph (c)(2) of this section has elapsed.

(4) Consistent with the Act, compliance with an energy conservation standard will be required upon the specified compliance date as published in the relevant rule in the **Federal Register**.

(5) Consistent with the Administrative Procedure Act, and other applicable law, the Secretary will ordinarily designate an effective date for a rule under this section that is no less than 30 days after the publication of the rule in the **Federal Register**.

(6) When the Secretary submits a rule for publication, the Secretary will make publicly available a written statement indicating how any properly filed requests for correction were handled.

(g) *Alteration of standards.* Until an energy conservation standard has been published in the **Federal Register**, the Secretary may correct such standard, consistent with the Administrative Procedure Act.

(h) *Judicial review.* For determining the prematurity, timeliness, or lateness of a petition for judicial review pursuant to section 336(b) of the Act (42 U.S.C. 6306), a rule is considered "prescribed" on the date when the rule is published in the **Federal Register**.

PART 431—ENERGY EFFICIENCY PROGRAM FOR CERTAIN COMMERCIAL AND INDUSTRIAL EQUIPMENT

■ 3. The authority citation for part 431 continues to read as follows:

Authority: 42 U.S.C. 6291–6317.

■ 4. Section 431.3 is revised to read as follows:

§ 431.3 Error Correction procedure for energy conservation standards rules.

Requests for error corrections pertaining to an energy conservation standard rule for commercial or industrial equipment shall follow those procedures and provisions detailed in 10 CFR 430.5 of this chapter.

[FR Doc. 2016–19968 Filed 8–23–16; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. FAA–2015–5391; Special Conditions No. 25–630–SC]

Special Conditions: The Boeing Company, Boeing Model 767–2C Airplane; Non-Rechargeable Lithium Battery Installations

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions.

SUMMARY: These special conditions are issued for the Boeing Model 767–2C airplane. This airplane will have a novel or unusual design feature when compared to the state of technology envisioned in the airworthiness standards for transport-category airplanes. This design feature is associated with non-rechargeable lithium battery installations. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

DATES: Effective April 22, 2017.

FOR FURTHER INFORMATION CONTACT: Nazih Khaouly, Airplane and Flight Crew Interface Branch, ANM–111, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW., Renton, Washington 98057–3356; telephone 425–227–2432; facsimile 425–227–1149.

SUPPLEMENTARY INFORMATION:

Future Requests for Installation of Non-Rechargeable Lithium Batteries

The FAA anticipates that non-rechargeable lithium batteries will be installed in other makes and models of airplanes. We have determined to require special conditions for all applications requesting non-rechargeable lithium battery installations, except the installations excluded in the Applicability section, until the airworthiness requirements can be revised to address this issue. Applying special conditions to these installations across the range of all transport-airplane makes and models ensures regulatory consistency among applicants.

The FAA issued special conditions no. 25–612–SC to Gulfstream Aerospace Corporation for their GVI airplane. Those are the first special conditions the FAA issued for non-rechargeable lithium battery installations. We explained in that document our determination to make those special conditions effective one year after publication of those special conditions in the **Federal Register**, and our intention for other special conditions for other makes and models to be effective on this same date or 30 days after their publication, whichever is later.

Background

On January 18, 2010, The Boeing Company (Boeing) applied for an amendment to type certificate no. A1NM to include a new Model 767–2C airplane. The Model 767–2C airplane is a twin-engine, transport-category freighter derivative of the Model 767–200 airplane currently approved under type certificate no. A1NM. This freighter has a maximum takeoff weight of 415,000 pounds and can be configured to carry up to 11 supernumeraries.

The Model 767–2C airplane incorporates provisions to support subsequent supplemental type certificate (STC) modifications, which are intended to provide additional mission capabilities, including provisions to support conversion into an aerial refueling platform (*i.e.*, tanker) configuration.

Type Certification Basis

Under the provisions of Title 14, Code of Federal Regulations, (14 CFR) 21.101, Boeing must show that the Model 767–2C airplane meets the applicable provisions of the regulations listed in type certificate no. A1NM or the applicable regulations in effect on the date of application for the change, except for earlier amendments as agreed upon by the FAA. The regulations listed in the type certificate are commonly referred to as the "original type certification basis." The regulations listed in type certificate no. A1NM are 14 CFR part 25, effective February 1, 1965, including Amendments 25–1 through 25–37, with exceptions listed in the type certificate. In addition, the certification basis includes other regulations, special conditions, and exemptions that are not relevant to these special conditions. Type certificate no. A1NM will be updated to include a complete description of the certification basis for this airplane model.

If the Administrator finds that the applicable airworthiness regulations (*i.e.*, 14 CFR part 25) do not contain adequate or appropriate safety standards for the Model 767–2C airplane because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions are initially applicable to the airplane model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same novel or unusual design feature, or should any other model already included on the same type certificate be modified to incorporate the same novel or unusual design feature, these special conditions would also apply to the other model under § 21.101.

In addition to the applicable airworthiness regulations and special conditions, the Model 767–2C airplane must comply with the fuel-vent and exhaust-emission requirements of 14 CFR part 34, and the noise-certification requirements of 14 CFR part 36.

The FAA issues special conditions, as defined in 14 CFR 11.19, in accordance with § 11.38, and they become part of the type-certification basis under § 21.101.

Novel or Unusual Design Features

The Boeing Model 767–2C airplane will incorporate non-rechargeable lithium batteries.

A battery system consists of the battery and any protective, monitoring, and alerting circuitry or hardware inside or outside of the battery. It also includes vents (where necessary) and packaging. For the purpose of these special conditions, a "battery" and "battery system" are referred to as a battery.

Discussion

The FAA derived the current regulations governing installation of batteries in transport-category airplanes from Civil Air Regulations (CAR) 4b.625(d) as part of the re-codification of CAR 4b that established 14 CFR part 25 in February 1965. We basically reworded the battery requirements, which are currently in § 25.1353(b)(1) through (b)(4), from the CAR requirements. Non-rechargeable lithium batteries are novel and unusual with respect to the state of technology considered when these requirements were codified. These batteries introduce higher energy levels into airplane systems through new chemical compositions in various battery-cell sizes and construction. Interconnection of these cells in battery packs introduces failure modes that require unique design considerations, such as provisions for thermal management.

Recent events involving rechargeable and non-rechargeable lithium batteries prompted the FAA to initiate a broad evaluation of these energy-storage technologies. In January 2013, two independent events involving rechargeable lithium-ion batteries demonstrated unanticipated failure modes. A National Transportation Safety Board (NTSB) letter to the FAA, dated May 22, 2014, which is available at *http://www.ntsb.gov,* filename A–14–032–036.pdf, describes these events.

On July 12, 2013, an event involving a non-rechargeable lithium battery in an emergency-locator-transmitter installation demonstrated unanticipated failure modes. The United Kingdom's Air Accidents Investigation Branch Bulletin S5/2013 describes this event.

Some known uses of rechargeable and non-rechargeable lithium batteries on airplanes include:

- Flight deck and avionics systems such as displays, global positioning systems, cockpit voice recorders, flight data recorders, underwater locator beacons, navigation computers, integrated avionics computers, satellite network and communication systems, communication-management units, and remote-monitor electronic line-replaceable units;
- Cabin safety, entertainment, and communications equipment, including emergency-locator transmitters, life rafts, escape slides, seatbelt air bags, cabin management systems, Ethernet switches, routers and media servers, wireless systems, internet and in-flight entertainment systems, satellite televisions, remotes, and handsets;
- Systems in cargo areas including door controls, sensors, video surveillance equipment, and security systems.

Some known potential hazards and failure modes associated with non-rechargeable lithium batteries are:

- *Internal failures:* In general, these batteries are significantly more susceptible to internal failures that can result in self-sustaining increases in temperature and pressure (*i.e.*, thermal runaway) than their nickel-cadmium or lead-acid counterparts. The metallic lithium can ignite, resulting in a self-sustaining fire or explosion.
- *Fast or imbalanced discharging:* Fast discharging or an imbalanced discharge of one cell of a multi-cell battery may create an overheating condition that results in an uncontrollable venting condition, which in turn leads to a thermal event or an explosion.
- *Flammability:* Unlike nickel-cadmium and lead-acid batteries, lithium batteries use higher energy and current in an electrochemical system that can be configured to maximize energy storage of lithium. They also use liquid electrolytes that can be extremely flammable. The electrolyte, as well as the electrodes, can serve as a source of fuel for an external fire if the battery casing is breached.

Special condition no. 1 requires that each individual cell within a non-rechargeable lithium battery be designed to maintain safe temperatures and pressures. Special condition no. 2 addresses these same issues but for the entire battery. Special condition no. 2 requires that the battery be designed to prevent propagation of a thermal event, such as self-sustained, uncontrolled increases in temperature or pressure from one cell to adjacent cells.

Special condition nos. 1 and 2 are intended to ensure that the non-rechargeable lithium battery and its cells are designed to eliminate the potential for uncontrolled failures. However, a certain number of failures will occur due to various factors beyond the control of the designer. Therefore, other special conditions are intended to protect the airplane and its occupants if failure occurs.

Special condition nos. 3, 7, and 8 are self-explanatory, and the FAA does not provide further explanation for them at this time.

Special condition no. 4 makes it clear that the flammable-fluid fire-protection requirements of § 25.863 apply to non-rechargeable lithium battery installations. Section 25.863 is applicable to areas of the airplane that could be exposed to flammable fluid leakage from airplane systems. Non-rechargeable lithium batteries contain electrolyte that is a flammable fluid.

Special condition no. 5 requires each non-rechargeable lithium battery installation to not damage surrounding structure or adjacent systems, equipment, or electrical wiring from corrosive fluids or gases that may escape. Special condition no. 6 requires each non-rechargeable lithium battery installation to have provisions to prevent any hazardous effect on airplane structure or systems caused by the maximum amount of heat it can generate due to any failure of it or its individual cells. The means of meeting these special conditions may be the same, but they are independent requirements addressing different hazards. Special condition no. 5 addresses corrosive fluids and gases, whereas special condition no. 6 addresses heat.

These special conditions will apply to all non-rechargeable lithium battery installations in lieu of § 25.1353(b)(1) through (b)(4) at Amendment 25–123. Sections 25.1353(b)(1) through (b)(4) at Amendment 25–123 will remain in effect for other battery installations.

These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

Discussion of Comments

Notice of proposed special conditions no. 25–16–01–SC, for the Boeing 767–2C airplane, was published in the **Federal Register** on January 27, 2016 [81 FR 4596]. We received four substantive comments.

The Aerospace Industries Association (AIA) provided several comments that were identical to their comments for special conditions no. 25–612–SC, which we issued to Gulfstream Aerospace Corporation for non-rechargeable lithium battery installations on Gulfstream GVI airplanes. The FAA responded to each of these comments in that final special conditions document. We incorporated the same revisions into these Boeing 767–2C special conditions that we incorporated into the Gulfstream GVI special conditions as a result of AIA's comments.

Boeing commented that they fully support AIA's comments.

Boeing requested that the FAA provide adequate time before non-rechargeable lithium battery special conditions become effective to support validation activities by foreign civil airworthiness authorities (FCAA) and to not adversely impact future airplane deliveries by all applicants. The FAA considered this same comment from Boeing for special conditions no. 25–612–SC and provided a detailed response in that document. We determined the effective date for these Boeing 767–2C special conditions based on Boeing's comment and other factors stated in special conditions no. 25–612–SC.

Boeing commented that the FAA needs to clearly define the applicability of these special conditions. Boeing's comment is similar to their comment on special conditions no. 25–612–SC. We provided a detailed response in special conditions no. 25–612–SC and have clearly defined the applicability for these Boeing 767–2C special conditions. One aspect of Boeing's comment that we did not address in special conditions no. 25–612–SC is that some design changes may not change a lithium battery installation but affect it, which results in these special conditions being applicable. For example, adding a heat source next to a lithium battery can increase its possibility of entering into thermal runaway. Lithium battery installations affected by design changes must meet these special conditions. Some examples of changes that affect lithium battery installations are those that:

- Increase the temperatures or pressures in a battery,
- Increase the electrical load on a battery,
- Increase potential for imbalance between battery cells,
- Modify protective circuitry for a lithium battery,
- Increase the airplane level risk due to the location of an existing lithium battery. An example is installation of a new oxygen line next to an existing part that has a lithium battery. The airplane level risk may increase due to the potential hazard of a lithium battery fire in the proximity of oxygen.

Gulfstream Aerospace Corporation commented that they agree with Boeing's comments and requested that the FAA consider incorporating their proposed changes into this document.

AmSafe recommended that the FAA state in the preamble that design mitigation or analysis at the airplane level may be applied to show that designs meet these special conditions. The FAA has determined that these special conditions are to require the battery to be designed to minimize the potential of uncontrollable failure, and to not only rely on mitigation of a battery failure at the airplane level. Therefore, we have not incorporated the proposed revision into the preamble of these special conditions.

AmSafe commented that they concur with proposed special condition no. 1 with an understanding that "foreseeable operating conditions" equates to the full normal operating envelope of the airplane. However, this is not a correct understanding of proposed special condition no. 1. The FAA intends for the term "foreseeable operating conditions," in these special conditions, to apply at the cell level and not only at the airplane level. In addition, "foreseeable" includes anticipated abnormal operating conditions.

AmSafe recommended revising proposed special condition no. 2 to read, "Battery installation and/or equipment containing any non-rechargeable lithium battery must preclude the occurrence of, or mitigate the effect of self-sustaining, uncontrolled increases in temperature or pressure." Amsafe's rationale was based on their recommendation that design mitigation or analysis at the airplane level be acceptable. As explained above, the FAA has determined that these special conditions are to require the battery to be designed to minimize the potential of uncontrollable failure, and to not only rely on mitigation of a battery failure at the airplane level. The FAA has not incorporated the proposed revision into special condition no. 2.

AmSafe recommended adding the phrase ". . . failure *which is not shown to be extremely remote* . . ." to proposed special condition no. 3. The FAA responds that service history shows that battery failure is not extremely remote. Therefore, to ensure that failures are properly anticipated and accounted for, we have not revised proposed special condition no. 3 to include these words.

AmSafe recommended deleting § 25.863(c)(d) from proposed special condition no 4. The FAA does not concur. Section 25.863 already applies to non-rechargeable lithium batteries since they contain electrolyte that is a flammable fluid. Since § 25.863 has historically been applied to flammable fluids related to propulsion and hydraulic systems, the FAA is including special condition no. 4 to ensure that there is no misunderstanding that § 25.863 also applies to these batteries.

AmSafe recommended revising proposed special condition no. 5 to prohibit damage to surrounding structure or adjacent systems, equipment, or electrical wiring from corrosive fluids or gases that may escape "in such a way as to cause a hazardous or catastrophic failure condition." AIA also recommended this revision. The FAA intends for special condition no. 5 to be consistent with § 25.1309. So, we added the words ". . . in such a way as to cause a major or more-severe failure condition." The revised special condition now reads, ". . . each non-rechargeable lithium battery installation must not damage surrounding structure or adjacent systems, equipment, or electrical wiring from corrosive fluids or gases that may escape in such a way as to cause a major or more-severe failure condition." The FAA does not concur with excluding major failure conditions.

AmSafe concurred with proposed special condition no. 6.

AmSafe concurred with proposed special condition no. 7 and recommended revising proposed special condition no. 8. However, the FAA deleted these proposed special conditions as explained in our response to AIA's comments in special conditions no. 25–612–SC.

AmSafe recommended revising "safe operation of the airplane" in proposed special condition nos. 9 and 10 to "*continued* safe operation of the airplane." The phrase "continued safe operation of the airplane" is used to refer to safe operation of the airplane after a failure has occurred. The phrase "safe operation of the airplane" is more general and appropriate for these special conditions. We did not incorporate AmSafe's proposed revision into these special conditions.

The FAA has determined that "uncontrolled" in special condition no. 2 should be "uncontrollable" to more accurately describe the concern. This revision does not change the intended meaning of this special condition.

Except as discussed above, the special conditions are adopted as proposed.

Applicability

As discussed above, these special conditions are applicable to the Model 767–2C airplane. Should the applicant apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design feature, or should any other model already included on the same type certificate be modified to incorporate the same novel or unusual design feature, these special conditions would apply to that model as well.

These special conditions are only applicable to design changes applied for after their effective date. The existing airplane fleet and follow-on deliveries of airplanes with previously certified non-rechargeable lithium battery installations are not affected.

These special conditions are not applicable to previously certified non-rechargeable lithium battery installations where the only change is either cosmetic or relocating the installation to improve the safety of the airplane and occupants. The FAA determined that this exclusion is in the public interest because the need to meet all of the special conditions might otherwise deter such design changes that involve relocating batteries. A cosmetic change is a change in appearance only, and does not change any function or safety characteristic of the battery installation.

Conclusion

This action affects only certain novel or unusual design features on one model of airplane. It is not a rule of general applicability.

List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and record keeping requirements.

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

The Special Conditions

Accordingly, the following special conditions are part of the type certification basis for the Boeing Model 767–2C airplane.

Non-Rechargeable Lithium Battery Installations

In lieu of § 25.1353(b)(1) through (b)(4) at Amendment 25–123, each non-rechargeable lithium battery installation must:

1. Maintain safe cell temperatures and pressures under all foreseeable operating conditions to prevent fire and explosion.
2. Prevent the occurrence of self-sustaining, uncontrollable increases in temperature or pressure.
3. Not emit explosive or toxic gases, either in normal operation or as a result of its failure, that may accumulate in hazardous quantities within the airplane.
4. Meet the requirements of § 25.863.
5. Not damage surrounding structure or adjacent systems, equipment, or electrical wiring from corrosive fluids or gases that may escape in such a way as to cause a major or more-severe failure condition.
6. Have provisions to prevent any hazardous effect on airplane structure or systems caused by the maximum amount of heat it can generate due to any failure of it or its individual cells.
7. Have a failure sensing and warning system to alert the flightcrew if its failure affects safe operation of the airplane.
8. Have a means for the flightcrew or maintenance personnel to determine the battery charge state if the battery's function is required for safe operation of the airplane.

Note: A battery system consists of the battery and any protective, monitoring, and alerting circuitry or hardware inside or outside of the battery. It also includes vents (where necessary) and packaging. For the purpose of these special conditions, a "battery" and "battery system" are referred to as a battery.

Issued in Renton, Washington, on August 11, 2016.

Paul Bernado,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2016–19991 Filed 8–23–16; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 95

[Docket No. 31093; Amdt. No. 528]

IFR Altitudes; Miscellaneous Amendments

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule

SUMMARY: This amendment adopts miscellaneous amendments to the required IFR (instrument flight rules) altitudes and changeover points for certain Federal airways, jet routes, or direct routes for which a minimum or maximum en route authorized IFR altitude is prescribed. This regulatory action is needed because of changes occurring in the National Airspace System. These changes are designed to provide for the safe and efficient use of the navigable airspace under instrument conditions in the affected areas.

DATES: *Effective Date:* 0901 UTC, September 15, 2016.

FOR FURTHER INFORMATION CONTACT: Richard A. Dunham, Flight Procedure Standards Branch (AMCAFS–420), Flight Technologies and Programs Division, Flight Standards Service, Federal Aviation Administration, Mike Monroney Aeronautical Center, 6500 South MacArthur Blvd., Oklahoma City, OK 73169 (Mail Address: P.O. Box 25082 Oklahoma City, OK 73125) telephone: (405) 954–4164.

SUPPLEMENTARY INFORMATION: This amendment to part 95 of the Federal Aviation Regulations (14 CFR part 95) amends, suspends, or revokes IFR altitudes governing the operation of all aircraft in flight over a specified route or any portion of that route, as well as the changeover points (COPs) for Federal airways, jet routes, or direct routes as prescribed in part 95.

The Rule

The specified IFR altitudes, when used in conjunction with the prescribed changeover points for those routes, ensure navigation aid coverage that is adequate for safe flight operations and free of frequency interference. The reasons and circumstances that create the need for this amendment involve matters of flight safety and operational efficiency in the National Airspace System, are related to published aeronautical charts that are essential to the user, and provide for the safe and efficient use of the navigable airspace. In addition, those various reasons or circumstances require making this amendment effective before the next scheduled charting and publication date of the flight information to assure its timely availability to the user. The effective date of this amendment reflects those considerations. In view of the close and immediate relationship between these regulatory changes and safety in air commerce, I find that notice and public procedure before adopting this amendment are impracticable and contrary to the public interest and that good cause exists for making the amendment effective in less than 30 days.

Conclusion

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—(1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. For the same reason, the FAA certifies that this amendment will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 95

Airspace, Navigation (air).

Issued in Washington, DC on August 12, 2016.

John Duncan,

Director, Flight Standards Service.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, part 95 of the Federal Aviation Regulations (14 CFR part 95) is amended as follows effective at 0901 UTC, July 21, 2016.

■ 1. The authority citation for part 95 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40103, 40106, 40113, 40114, 40120, 44502, 44514, 44719, 44721.

■ 2. Part 95 is amended to read as follows:

REVISIONS TO IFR ALTITUDES & CHANGEOVER POINT

[Amendment 528, Effective Date September 15, 2016]

From	To	MEA
§ 95.6001 VICTOR ROUTES–U.S § 95.6005 VOR Federal Airway V5 Is Amended To Read in Part		
Pecan, GA VORTAC *1900–MOCA	Vienna, GA VORTAC	*2000
§ 95.6006 VOR Federal Airway V6 Is Amended To Read in Part		
Liter, WY FIX *7600—MOCA	Sidney, NE VORTAC	*9500
Sidney, NE VORTAC *5700–MOCA.	North Platte, NE VORTAC	*6000
Grand Island, NE *3200—MOCA.	VORTAC HUSKR, NE FIX	*4000
§ 95.6008 VOR Federal Airway V8 Is Amended To Read in Part		
Grand Island, NE VORTAC *3200—MOCA.	Huskr, NE FIX	*4000
§ 95.6020 VOR Federal Airway V20 Is Amended To Read in Part		
Maddi, GA FIX *2200–MOCA.	Athens, GA VOR/DME	*3000
Athens, GA VOR/DME *2300—MOCA.	Electric City, SC VORTAC	*2800
§ 95.6025 VOR Federal Airway V25 Is Amended To Read in Part		
Santy, CA FIX	Woodside, CA VORTAC	5100
§ 95.6035 VOR Federal Airway V35 Is Amended To Read in Part		
*Saler, GA FIX *3000–MRA. **1700–MOCA.	Pecan, GA VORTAC	**2000

Revisions to IFR Altitudes & Changeover Point—Continued

[Amendment 528, Effective Date September 15, 2016]

From	To	MEA
Maddi, GA FIX *2200–MOCA.	Athens, GA VOR/DME	*3000
Athens, GA VOR/DME *2300–MOCA.	Electric City, SC VORTAC	*2800
§ 95.6039 VOR Federal Airway V39 Is Amended To Read in Part		
Lancaster, PA VORTAC	Boyer, PA FIX	2900
§ 95.6066 VOR Federal Airway V66 Is Amended To Read in Part		
Maddi, GA FIX *2200–MOCA.	Athens, GA VOR/DME	*3000
Athens, GA VOR/DME *2200–MOCA.	Greenwood, SC VORTAC	*2500
§ 95.6087 VOR Federal Airway V87 Is Amended To Read in Part		
Santy, CA FIX	Woodside, CA VORTAC	5100
§ 95.6109 VOR Federal Airway V109 Is Amended To Read in Part		
Salad, CA FIX *4700–MCA	*Oakland, CA VORTAC Oakland, CA VORTAC, NE BND.	4000
§ 95.6138 VOR Federal Airway V138 Is Amended To Read in Part		
Piety, WY FIX *7000–MOCA.	Sidney, NE VORTAC	*7600
Grand Island, NE VORTAC *3200–MOCA.	Brady, NE FIX	*3600
§ 95.6159 VOR Federal Airway V159 Is Amended To Read in Part		
*Saler, GA FIX *3000–MRA. **1700–MOCA.	Pecan, GA VORTAC	**2000
Pecan, GA VORTAC *2800–MRA. **1800–MOCA.	*Shany, GA FIX	**2000
§ 95.6169 VOR Federal Airway V169 Is Amended To Read in Part		
Akron, CO VOR/DME *6200–MOCA.	Sidney, NE VORTAC	*6400
§ 95.6197 VOR Federal Airway V197 Is Amended To Read in Part		
Palmdale, CA VORTAC *8300–MCA	*Fisch, CA FIX Fisch, CA FIX, NW BND.	5000
§ 95.6325 VOR Federal Airway V325 Is Amended To Read in Part		
Vesto, GA FIX *2200–MOCA.	Athens, GA VOR/DME	*2500
§ 95.6380 VOR Federal Airway V380 Is Amended To Read in Part		
Wolbach, NE VORTAC *3300–MOCA.	Grand Island, NE VORTAC	*4000
§ 95.6417 VOR Federal Airway V417 Is Amended To Read in Part		
Athens, GA VOR/DME *2100–MOCA.	Colliers, SC VORTAC	*2500
§ 95.6457 VOR Federal Airway V457 Is Amended To Read in Part		
Broadway, NJ VOR/DME	Lancaster, PA VORTAC	3000

REVISIONS TO IFR ALTITUDES & CHANGEOVER POINT—Continued

[Amendment 528, Effective Date September 15, 2016]

From	To	MEA
§ 95.6499 VOR Federal Airway V499 Is Amended To Read in Part		
Lancaster, PA VORTAC	Binghamton, NY VORTAC	4500
§ 95.6578 VOR Federal Airway V578 Is Amended To Read in Part		
Pecan, GA VORTAC *2300–MOCA.	Tift Myers, GA VOR	*2500
§ 95.6579 VOR Federal Airway V579 Is Amended To Read in Part		
Viola, FL FIX *1600–MOCA.	Sarasota, FL VORTAC	*3000
§ 95.6440 Alaska VOR Federal Airway V440 Is Amended To Read in Part		
Nome, AK VOR/DME *4500–MRA.	*Golos, AK FIX	3000
*Golos, AK FIX *4500–MRA.	Unalakleet, AK VOR/DME	3000
Unalakleet, AK VOR/DME W BND 4600. E BND 8000.	Yucon, AK FIX.	

From	To	Changeover points	
		Distance	From
§ 95.8003 VOR Federal Airway Changeover Point Airway Segment Alaska V440 Is Amended To Add Changeover Point			
Nome, AK VOR/DME	Unalakleet, AK VOR/DME	45	Nome

[FR Doc. 2016–20292 Filed 8–23–16; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF LABOR

Employment and Training Administration

20 CFR Part 615

RIN 1205–AB62

Federal-State Unemployment Compensation Program; Implementing the Total Unemployment Rate as an Extended Benefits Indicator and Amending for Technical Corrections; Final Rule

AGENCY: Employment and Training Administration, Labor.

ACTION: Final rule.

SUMMARY: The Employment and Training Administration (ETA) of the U.S. Department of Labor (Department) issues this final rule to implement statutory amendments to the Extended Benefits (EB) program, which pays extra weeks of unemployment compensation during periods of high unemployment in a State. Specifically, this final rule codifies a methodology for computing the Total Unemployment Rate (TUR) indicator which is an optional indicator used to measure unemployment in a State. Also, the final rule makes technical corrections to the current regulations and corrects minor mistakes.

DATES: This rule is effective October 24, 2016.

FOR FURTHER INFORMATION CONTACT: Gay Gilbert, Administrator, Office of Unemployment Insurance, Employment and Training Administration, (202) 693–3029 (this is not a toll-free number) or 1–877–889–5627 (TTY). Individuals with hearing or speech impairments may access the telephone number above via TTY by calling the toll-free Federal Information Relay Service at (800) 877–8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

I. Purpose of the Regulatory Action

a. ETA issues this final rule to implement statutory amendments to the EB program, which pays extra weeks of unemployment compensation during periods of high unemployment in a State. Specifically, this final rule codifies a methodology for computing the TUR indicator, which is an optional indicator used to measure unemployment in a State. Also, the final rule makes technical corrections to the current regulations and corrects minor mistakes.

b. The Unemployment Compensation Amendments of 1992, Public Law 102–318, added Section 203(f), EUCA, to provide for an optional alternative indicator that States may use to trigger "on" EB based on the TUR. That indicator requires that, for the most recent 3 months for which data for all States is published, the average TUR in the State (seasonally adjusted) for the most recent 3-month period equals or exceeds 6.5 percent and the average TUR in the State (seasonally adjusted) equals or exceeds 110 percent of the average TUR for either or both of the corresponding 3-month periods in the 2 preceding calendar years (look-back). The 1992 amendments also provided for a calculation of a "high unemployment period" when the TUR in a State equals or exceeds 8 percent and meets the 110-percent look-back described above, permitting the payment of additional weeks of EB. Section 203(f)(3), EUCA, provides that "determinations of the rate of total unemployment in any State for any period . . . shall be made by the Secretary." An EB period ends when the State no longer meets any of the "on" triggers provided for in State law.

II. Summary of the Major Provisions of the Regulatory Action in Question

To conform the regulations to current practice, the Department is issuing this final rule to describe how the TUR indicators are computed for purposes of determining whether a State meets the 110 percent look-back requirements. The final rule regulations at 20 CFR 615 implement the provisions of EUCA relating to the insured unemployment rate (IUR) indicators, including how they will be computed. The regulation, at 20 CFR 615.12, explains the IUR triggers and how the rates are computed. Until this final rule, the regulation did not address the TUR indicator although the Department issued UIPLs No. 45–92 and No. 16–11, respectively, addressing the TUR indicator and its computation.

Because of these differences in the calculation of the insured and total unemployment rates, the appropriate methodology for computing the look-back percentage for the TUR indicator is to switch from truncation at the second decimal place, which is used for calculating the IUR indicator, to rounding to the second decimal place.

III. Costs and Benefits

This rule has not been designated an economically significant rule under section 3(f) of Executive Order 12866. However, the Department provides an analysis of the impact of the final rule, including a costs and benefits analysis under Executive Order 13563, in the Administrative Section of this final rule. This costs and benefits analysis was conducted for the proposed rule. Since the Department made no changes in the final rule, a new analysis was not conducted.

The Preamble to this final rule is organized as follows:

I. Background—provides a brief description of the development of the final rule.
II. Review of the Final Rule—analyzes comments and summarizes and discusses changes to the Federal-State Unemployment Compensation Program.
III. Administrative Information—sets forth the applicable regulatory requirements.

I. Background

An understanding of the basic elements that comprise the mechanisms used to determine if EB is payable in a State is necessary to appreciate the dynamics of the EB program. EB programs can be triggered by two different measures for unemployment: The IUR and TUR. The table below compares the characteristics of each.

Characteristics	IUR	TUR
Type of Data	Administrative	Sample.
Definition	Continued Claims/Covered Employment	Unemployed/Employed+Unemployed.
Seasonally Adjusted	No	Yes.
Data Source	States	Bureau of Labor Statistics.
Collection Frequency	Weekly	Monthly.
Trigger Value Computation	13-Week Moving Average	3-Month Moving Average.

EB is payable in a State only during an EB period of unusually high unemployment in the State. Section 203 of the Federal-State Extended Unemployment Compensation Act of 1970 (EUCA), Public Law 91–373, provides methods for determining whether a State's current unemployment situation qualifies as an EB period. EB periods are determined by "on" and "off" indicators (commonly referred to as triggers) in the State. Section 203(d), EUCA, provides for an "on" indicator based on the IUR. The IUR is computed weekly by the States using administrative data on State unemployment compensation claims filed and the total population of employed individuals covered by unemployment insurance. States trigger "on" EB if the IUR trigger value for the most recent 13-week period equals or exceeds 5 percent and equals or exceeds 120 percent of the average of such trigger values for the corresponding 13-week period ending in each of the preceding 2 calendar years. The calculation of the relationship between the current rate and prior 2 years' rates is commonly referred to as the "look-back."

The Unemployment Compensation Amendments of 1992, Public Law 102–318, added Section 203(f), EUCA, to provide for an optional alternative indicator that States may use to trigger "on" EB based on the TUR. That indicator requires that, for the most recent 3 months for which data for all States is published, the average TUR in the State (seasonally adjusted) for the most recent 3-month period equals or exceeds 6.5 percent and the average TUR in the State (seasonally adjusted) equals or exceeds 110 percent of the average TUR for either or both of the corresponding 3-month periods in the 2 preceding calendar years (look-back). The 1992 amendments also provided for a calculation of a "high unemployment period" when the TUR in a State equals or exceeds 8 percent and meets the 110 percent look-back described above, permitting the payment of additional weeks of EB. Section 203(f)(3), EUCA, provides that "determinations of the rate of total unemployment in any State for any period . . . shall be made by the Secretary." An EB period ends when the State no longer meets any of the "on" triggers provided for in State law.

Regulations at 20 CFR part 615 implement the provisions of EUCA relating to the IUR indicators, including how they will be computed. The regulation at 20 CFR 615.12 explains the IUR triggers and how the rates are computed. The regulation does not address the TUR indicator although the Department issued UIPLs No. 45–92 and No. 16–11, respectively, addressing the TUR indicator and its computation. To conform the regulations to current practice, the Department is issuing this final rule to describe how the TUR indicators are computed for purposes of determining whether a State meets the 110 percent look-back requirements.

In the absence of explicit guidance and regulation, the Department previously adapted a portion of the existing guidance for the IUR look-back as a basis for calculating the TUR look-back. Specifically, in computing the look-back percentage for the TUR trigger the procedure for determining the number of significant digits from the resulting fraction followed 20 CFR 615.12(c)(3).

The TUR indicator uses total unemployment rates determined by the Bureau of Labor Statistics (BLS). These rates are measured using sampled data and therefore are imprecise due to sampling error. In order to ensure that the TUR indicator is measured with more consistency to similar measures, and to the extent possible, a more accurate measure, the Department has determined that an appropriate methodology for computing the look-back on the TUR indicator is to switch from truncation to rounding to the nearest hundredth, or second decimal place. Additionally, rounding, rather than truncating, is consistent with BLS practices in treating the TUR data. UIPL No. 16–11, dated May 20, 2011, informed the State Workforce Agencies (SWAs) that the full effect of this new rounding procedure was implemented retroactive to April 16, 2011.

General

Section 3304(a)(11) of the Federal Unemployment Tax Act (26 U.S.C. 3301 *et seq.*) (FUTA) requires, as a condition of employers in States receiving credits against the Federal unemployment tax, that the States' unemployment compensation laws provide for the payment of extended unemployment compensation during periods of high unemployment to eligible individuals. EUCA established the EB Program by which, if certain conditions are met in a State under its law, extended unemployment compensation is provided to workers in the State who have exhausted their regular compensation during a period of high unemployment referred to as an EB period. EUCA provides methods for determining whether an EB period exists in the State. These methods are referred to as "on" or "off" indicators.

There were two "on" and "off" indicators in existence before the enactment of the UC Amendments. These indicators were based on the IUR. The IUR indicator's trigger value is, under section 203(e) of EUCA, the ratio of the average number of unemployment claims filed in a State during the most recent 13 weeks to the average monthly number of employed individuals covered by UC in that State during the first four of the last six completed calendar quarters. The first indicator has two conditions which must be met and is required to be in State law. Under section 203(d) of EUCA, the EB Program is activated if a State's IUR trigger value (first condition) is at least 5 percent (referred to as the regular IUR trigger threshold with "look-back"), and is at least 120 percent of the average of the trigger values in the prior 2 years for the corresponding 13-week calendar periods (second condition). The second condition—that the most recent 13-week period must be at least 120 percent of the average of the corresponding periods in the last 2 years—is commonly referred to as the "look-back" provision. (The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, Public Law 111–312, allowed States to temporarily modify provisions in their EB laws to use the prior 3 years in applying the look-back.) The look-back provision supports activation of a State's EB Program only when the current unemployment rate is both high and increasing, which indicates that the State's labor market is worsening and additional compensation is warranted. Under the second indicator, which is an option for a State, section 203(d) of EUCA provides the EB Program may be triggered "on" with an IUR trigger value of at least 6 percent regardless of its relation to the IUR trigger values in the preceding 2 years. The 6 percent value is referred to as the regular IUR trigger threshold without look-back.

Alternative Indicator

Because the IUR indicator failed to trigger many States "on" to the EB Program during the recession of the early 1990s, the UC Amendments amended the EUCA to permit States to adopt an alternative, more labor market sensitive, indicator based on the TUR to trigger "on" and "off" the EB Program. Specifically, paragraph (f) of section 203 of EUCA provides for a TUR indicator comprised of a Trigger Value and look-back provision. The Trigger Value for this indicator is the 3-month average of seasonally adjusted TURs for the most recent 3 months for which data for all States is published. The regular TUR trigger threshold is 6.5 percent. The look-back provision requires that the Trigger Value equals or exceeds 110 percent of the TUR Trigger Values for either or both of the corresponding 3-month periods in the 2 preceding calendar years. The TUR Trigger Value is determined by the Department based on data from BLS.

As with the IUR indicator, the look-back provision ensures that the State's TUR Trigger Value is both high and increasing, indicating that the State's labor market is worsening and additional compensation is warranted. A State will trigger "off" its EB Program when either the TUR Trigger Value falls below 6.5 percent, or the requirements pertaining to the look-back provision are not satisfied.

Regardless of whether a State's EB Program is triggered "on" based on the IUR or TUR indicators, sections 203(d)(2) and 203(f)(1)(B) of EUCA provide that the EB period is triggered "off" when the conditions supporting the activation of the EB Program are no longer satisfied. Additionally, when the program triggers "on" or "off" EB payments, it must remain in the new status ("on" or "off" EB payments) for a minimum of 13 weeks regardless of changes in future trigger values.

The Department implemented EUCA's provisions on the IUR indicator at 20 CFR part 615, published in 53 FR 27928, Jul. 25, 1988. The Department implemented the alternative TUR indicator provided by the UC Amendments through guidance on August 31, 1993 (UIPL No. 45–92). The Department now incorporates the TUR indicator into regulations.

Payments of Additional Weeks of Extended Benefits

The UC Amendments provided that States electing to use the new TUR indicator must also provide for the payment of additional weeks of EB during a "high unemployment period" that occurs during an EB period. These additional weeks of EB are available if State law provides for the use of the alternative TUR indicator.

Consistent with EUCA § 203(b)(1), no EB period or high unemployment period may begin in any State by reason of a State "on" indicator before the 13-week minimum status period expires after the ending of a prior EB period with respect to such State. Conversely, no EB period or high unemployment period may end in any State by reason of a State "off" indicator before the 13-week minimum status period expires after the beginning of an EB period with respect to such State.

EUCA originally provided for the establishment of an EB account, and the amount in the account is the least of one of three amounts which is payable for regular extended compensation. The UC amendments added a new paragraph to section 202(b) of EUCA that increases the amount in these accounts during a high unemployment period. The amount payable in a high unemployment period is equal to whichever of the following is the least and is referred to as "high unemployment extended compensation":

—80 percent (as opposed to 50 percent in a "normal" EB period) of the total amount of regular UC (including dependent's allowances) payable to the individual during the benefit year;

—20 (as opposed to 13) times the individual's weekly benefit amount; or

—46 (as opposed to 39) times the individual's weekly benefit amount, reduced by the regular UC paid (or deemed paid) during the benefit year.

The term "high unemployment period" is defined in Section 202(b)(3)(B), EUCA, as any period during which an EB Program would be in effect if the TUR indicator equaled or exceeded 8 percent and the TUR indicator equals or exceeds 110 percent of the TUR indicators for either or both the corresponding 3-month periods in the 2 previous calendar years.

Whether a high unemployment period exists in a State for a particular week is determined in accordance with provisions of State law implementing sections 202(b)(3) and 203(f) of EUCA and the seasonally adjusted TUR indicator determined by BLS. When this determination is made, the State follows the requirements of sections 203(a) and (b) of EUCA for determining the first and last week for which high unemployment EB is payable. Specifically, a high unemployment EB period begins on the first day of the third calendar week after the TUR indicator requirements are satisfied, and ends on the last day of the third week after the first week for which the TUR indicator requirements are not met. However, as stated above, no EB period or high unemployment period may begin in any State by reason of a State "on" indicator before the 13-week minimum status period expires after the ending of a prior EB period with respect to such State.

Alternative Indicator Rounding Methodology

Before April 16, 2011, in absence of explicit statutory guidance and regulation, the Department adapted a portion of the requirement (in 20 CFR 615.12) for calculating the look-back percentage for the IUR indicator as a basis for determining the significant number of digits from the look-back percentage for the TUR indicator. Specifically, the quotient is computed to two decimal places and multiplied by 100 with all numbers to the right of the decimal point being dropped (known as "truncation"). The result is expressed as a percentage.

The UC Amendments provide for a State to trigger "on" EB using the TURs determined by BLS. As discussed above, because the TUR indicator uses unemployment rates determined by BLS using sampled data, the rates are imprecise due to sampling error. In order to ensure that the TUR indicator is measured with more consistency to similar measures, and to the extent possible, a more accurate measure, the Department has determined that an appropriate methodology for computing the look-back on the TUR indicator is to switch from truncation to rounding to the nearest hundredth. In contrast, the IUR indicator values are computed from administrative data and thus represent the full universe. Because of these differences in the calculation of the insured and total unemployment rates, on May 20, 2011 the Department announced, in UIPL No. 16–11, that an appropriate methodology for computing the look-back percentage for the TUR indicator is to switch from truncation at the second decimal place to rounding to the second decimal place.

UIPL No. 16–11 informed States of the new rounding methodology the Department now employs when computing the current trigger rate as a percent of the comparable trigger rates in prior years for the TUR indicator. Since TURs have been rounded, an expression of a ratio of two TURs must also be rounded.

On a monthly basis, the 3-month average of the seasonally adjusted TUR is divided by the same measure for the corresponding 3 months in each of the applicable 2 prior years. The resulting decimal fraction is then rounded to the hundredths place (the second digit to the right of the decimal place). The resulting number is multiplied by 100, reported as an integer, and compared to the statutory threshold to determine if the State triggers "on" EB. UIPL No. 16–11 informed the SWAs that the full effect of this new rounding procedure was implemented retroactive to April 16, 2011.

II. Review of the Final Rule

The Department published the Notice of Proposed Rulemaking (NPRM) on the subject of this final rule in the **Federal Register** on October 27, 2014 at 79 FR 63859. The NPRM had a 60-day public comment period and allowed for the submission of comments by hand delivery or U.S. Mail or by electronic submission at *www.regulations.gov.*

At the close of the 60-day public comment period at midnight on December 26, 2014, the Department had received one public comment. After a careful analysis of the comment, which was posted on *www.regulations.gov,* the Department determined that the comment did not raise any substantive issues that required a response in the final rule. In addition, the Department received no requests for extensions of the public comment period.

Therefore, because the Department did not receive any comments that required a response on the NPRM, this final rule adopts the regulation as proposed, with minor technical corrections explained below.

The final rule updates 20 CFR part 615 so that it includes the TUR indicator. In addition, the final rule updates Part 615 to incorporate the rounding method adopted for the look-back. Also, the final rule makes technical amendments to this part to update its provisions since the last regulatory revision and to correct minor errors in the text of the existing regulations.

However, since the NPRM publication, the Department discovered that minor technical corrections were needed. A non-substantive technical addition of a phrase was made in the definition of "Department" in § 615.2 to acknowledge that a Secretary's Order delegating authority to ETA can be superseded. A non-substantive technical addition was made in the definition of "Extended compensation" in § 615.2 to clarify that "extended benefits" can be used interchangeably with "extended compensation." Non-substantive deletions were made, in the definition of "Extended unemployment compensation" in § 615.2, of paragraphs (3) and (4). Paragraph (3) of § 615.2 in the NPRM was deleted because it redundantly repeats the substance in paragraph (1) of that section. Paragraph (4) of § 615.2 was deleted because it was placed in this location of the NPRM erroneously, simply as a typographical error.

For ease of reading § 615.2, the definitions in this section have been printed in their entirety. The following definitions are unchanged with the exception of changing Act to EUCA where appropriate: Additional compensation; And; Applicable State; Applicable State law; Average weekly benefit amount; Base period; Benefit structure; Benefit year; Claim filed in any State under the interstate benefit payment plan; Compensation and unemployment compensation; Date; Employed; Gross average weekly remuneration; Hospitalized for treatment of an emergency or life-threatening condition; Individual's capabilities; Jury duty; Reasonably short period; Regular compensation; Secretary; State; State agency; State law; systematic and sustained effort; Tangible evidence; and Week of unemployment. Also, an "s" was removed from the word "mean" in the definition of "Employed," and since the paragraph designations were removed in order to reorder the definitions alphabetically, the phrase "(n)(2) of this section" was replaced with "(2) of this definition" in paragraph (1), and the phrase "(n)(1) of this section" was replaced with "(1) of this definition" in paragraph (2) in the definition of "Week of unemployment."

Paragraph (a) of § 615.7 in the NPRM was revised in the final rule to delete the following language—

> Removing the term "Extended Benefits" wherever it appears and replacing it with the term "Extended compensation" throughout.

This is no longer necessary since a technical correction was made in the definition of "Extended compensation" in § 615.2 to clarify that "extended benefits" can be used interchangeably with "extended compensation."

Non-substantive deletions were made in paragraph (d) of § 615.11, which discusses the limitations in an extended benefit period. The paragraph was revised to delete from the NPRM language which reads—

> extended benefit period or high unemployment period may begin in any State by reason of a State "on" indicator before the 14th week after the ending of a prior extended benefit period or high unemployment period in such State. Conversely, no extended benefit period or high unemployment period may end in any State by reason of a State "off" indicator before the 14th week after the beginning of an extended benefit period or high unemployment period in such State. In addition, no . . .

since this criteria is covered in paragraph (c) of the same section.

Three technical corrections were made in § 615.12. First, "our concurrence" was replaced with "the concurrence of the Department" in paragraph (d)(1). Second, in paragraph (d)(2), "Bureau of Labor Statistics" was spelled out since it is the first use in the rule text, and the paragraph was slightly revised to clarify that unemployment data released by BLS for each month have an initial release and then regular revisions. Third, an identical sentence in paragraphs (e)(1)(ii) and (e)(2)(ii) referencing the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, Public Law 111–312, was deleted from both paragraphs because it describes a temporary provision of law that no longer applies. Several non-substantive additions and deletions were made in § 615.13. The first was to clarify that paragraphs (a) and (b) were revised by adding paragraphs (a)(1), (a)(2), (b)(1), (b)(2), and (b)(3). Second, the phrase "the Department determines" was added after the word "which" in paragraph (a)(1). Third, the phrase "or high unemployment period" was added in paragraphs (a)(1) and (a)(2). Fourth, "a result of our determination" was replaced with "determined by the Department to be" in paragraph (a)(1).

Finally, typographical errors were corrected in §§ 615.2, 615.12, 615.13, 615.14, and 615.15. In § 615.2, a comma was added after the word "published" in the definition of "High unemployment period," and "is" was replaced with "as" before the word "described" in the definition of "Trigger Value." In § 615.12, an "s" was added to the word "State" in paragraph (e)(2)(i), and "However" was deleted and the "t" in the word "the" was capitalized to begin the sentence in paragraph (f). In paragraph (a)(1) of § 615.13, "the" was replaced with "a" before the word "notice"; "to us" located after the word "acceptable" was deleted; "we" was replaced with "the Department"; "will" was added before the phrase "publish in the **Federal Register**"; and the word "publish" was revised to read "publishes" before the phrase "that information". In paragraph (a)(2) of § 615.13, "our" was replaced with "of the Department's" before the word "determination". In § 615.14, the citation to paragraph (a) was corrected to paragraph (c), and the citation to paragraph (a)(4) was corrected to paragraph (c)(4). In § 615.15, "we" was replaced with "the Department," and "require" was revised to read "requires".

The final rule, as explained also in the discussion of Paperwork Reduction Act requirements below, retains proposed revisions in the NPRM to regulatory requirements at § 615.15, pertaining to records and reports State agencies must submit. Paragraphs (a) and (b) are revised for clarity by deleting unnecessary language regarding the Secretary's authority to request Extended Benefit Program reports and to appoint audit officials for those reports. Furthermore, the final rule deletes paragraphs (c) and (d). In reference to reporting guidelines discussed in the Paperwork Reduction Act, the ET Handbook is a more effective way to communicate reporting requirements, because codifying the reporting requirements in paragraphs (c) and (d) of § 615.15 prevents the Department from adapting reporting instructions to changing conditions or needs. The ET Handbook requires the weekly submission of Forms ETA–538 and ETA–539. These forms have been computerized and contain information on initial Unemployment Insurance claims and continued weeks claimed. These figures are important economic indicators. Form ETA–538 provides information allowing release of advance unemployment claims information to the public five days after the close of the reference period. Form ETA–539 contains more detailed weekly claims information and the State's 13-week IUR that is used to determine eligibility for the Extended Benefits program. The reporting requirements in paragraphs (c) and (d) of the old regulation are included in the ET Handbook, and elimination of the requirements in regulation allow for ease in making future modifications by simply updating the ET Handbook.

Furthermore, paragraph (d) existed during the implementation phase of the IUR indicator and required States to submit the method used to identify and select the weeks used for EB trigger purposes to ensure that States were consistent and comparable in their methods. With 30 years of experience, as well as numerous data validation and data quality programs in effect, the Department has determined it is unnecessary to compel State administrators to provide this information. Current reporting guidelines contained in the ET Handbook are clear enough that States continue to have clear standards about which claims are used for constructing totals used to compute trigger values, thus permitting the deletion of this paragraph. The NPRM did not change the existing reporting requirements for Forms ETA–538 or ETA–539, and the Department received no substantive comments on the NPRM during the public comment period.

III. Administrative Information

Executive Orders 12866 and 13563

Executive Orders (E.O.) 13563 and 12866 direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects; distributive impacts; and equity). E.O. 13563 emphasizes the importance of quantifying both costs and benefits, reducing costs, harmonizing rules, and promoting flexibility.

Section 3(f) of E.O. 12866 defines a "significant regulatory action" as an action that is likely to result in a rule that: (1) Has an annual effect on the economy of $100 million or more or adversely and materially affects a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or Tribal governments or communities (also referred to as "economically significant"); (2) creates serious inconsistency or otherwise interferes with an action taken or planned by another agency; (3) materially alters the budgetary impacts of entitlement grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raises novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in E.O. 12866. Regarding item (4), any novel legal or policy issues raised by this rule do not arise from legal mandates, Presidential priorities, or the principles set forth in E.O. 12866.

For a "significant regulatory action," E.O. 12866 asks agencies to describe the need for the regulatory action and explain how the regulatory action will meet that need, as well as assess the costs and benefits of the regulation.[1] In the Unemployment Compensation Amendments of 1992 (UC Amendments), Congress adopted an optional indicator for the existing EB Program that is based on both the level of the TUR Trigger Value and the percentage the Trigger Value is of Trigger Values in comparable periods in each of the prior years (referred to as the look-back).[2] Although the TUR indicator was implemented in the early 1990s, there was never any regulation put in place defining its computation and its application. The Department is establishing regulations for the TUR indicator which interpret the law related to the TUR indicator and clarify the computation of its look-back provision. As discussed in more detail in the Background section above, the Department uses rounding to calculate the TUR because it is consistent with the BLS's calculation of unemployment rates. Based on the economic impact analysis that follows, the Department believes this is not an economically significant regulatory action.

EUCA, as amended by the UC Amendments, requires two conditions be met for a TUR-based "on" indicator to occur in a State: (1) For the most recent 3 months for which data for all States is published, the 3-month average seasonally adjusted TUR in the State equals or exceeds 6.5 percent, and (2) that the Trigger Value equals or exceeds 110 percent of the Trigger Values for either or both of the corresponding 3-month periods in the 2 preceding calendar years (look-back). The UC Amendments also provide for a "high unemployment period" when the TUR Trigger Value in a State equals or exceeds 8 percent and meets the 110 percent look-back described above, permitting the payment of additional weeks of compensation.[3] States that want to use the optional TUR indicator must have authority under State law which may require States to enact legislation that implements the Federal requirements. An EB period ends when the State no longer meets any of the "on" requirements provided for in State law.

Under the original methodology by which the Department determined the look-back criterion for the optional TUR indicator, the indicator's Trigger Value was divided by the indicator's Trigger Value for the comparable period in the preceding year and 2nd preceding year. Digits beyond the hundredths place (the second digit to the right of the decimal place) in the resultant decimal fractions were truncated and the results multiplied by 100 to determine the percent the current indicator Trigger Value was of the indicator Trigger Value in the comparable periods in the prior years. If the result was greater than or equal to 110 for one of the fractions, the look-back criterion was met. This approach paralleled the method used for the IUR look-back computation established in regulations at 20 CFR 615.12(c)(3); however, neither the law nor regulations specify the method for computing the TUR indicator look-back.[4]

The Department is changing the method for computing the TUR look-back by rounding to the hundredths place, rather than truncating. The TUR indicator uses total unemployment rates determined by BLS. These rates are measured using sampled data and therefore are imprecise due to sampling error. In order to ensure that the TUR indicator is measured with more consistency to similar measures, and to the extent possible, a more accurate measure, the Department has determined that an appropriate methodology for computing the look-back on the TUR indicator is to switch from truncation to rounding to the nearest hundredth, or second decimal place. In contrast, IUR indicators are computed from administrative data and thus represent the full universe. Because of these differences in the computation of the insured and total unemployment rates, the Department has determined that an appropriate methodology for computing the look-back for the TUR indicator is to switch from truncation at the second decimal place, to rounding to the second decimal place. Rounding, rather than truncating, is consistent with BLS practices for TUR data. UIPL No. 16–11, dated May 20, 2011, informed the SWAs that the full effect of this new rounding procedure was implemented retroactive to April 16, 2011.

Rounding Change in the TUR Look-Back Computation

Original Method:

$$\frac{\text{Three Mo. SATUR}}{\text{Three Mo. SATUR (-1)}} = \text{(ratio truncated at second decimal place)} * 100$$

New Method:

$$\frac{\text{Three Mo. SATUR}}{\text{Three Mo. SATUR (-1)}} = \text{(ratio rounded at second decimal place)} * 100$$

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[1] Executive Order No. 12866, § 6(a)(3)(B).

[2] Unemployment Compensation Amendments of 1992, Public Law 102–318 (1992). This law added Section 203(f) to EUCA to provide for an optional alternative indicator that States may use to trigger "on" or "off" EB based on the total unemployment rate. EUCA originally provided for an "on" indicator based only on the IUR. EUCA, § 203(d)–(e).

[3] EUCA, § 202(b)(3)(B). Meeting the 6.5 percent TUR indicator permits eligible claimants to receive up to an additional 50 percent of their regular entitlement during an EB period. Meeting the 8.0 percent indicator permits eligible claimant to receive up to a total of 80 percent of their regular entitlement during a high EB period.

[4] EUCA provides that "determinations of the rate of total unemployment in any State for any period . . . shall be made by the Secretary." EUCA, § 203(f)(3).

Where:

Three Mo. SATUR = 3-month average seasonally adjusted total unemployment rate.

Three Mo. SATUR (−1) = 3-month average seasonally adjusted total unemployment rate for the corresponding period in the prior year period.

Potential Impacts

Changing the look-back computational method will have a marginal economic impact because of the new rounding method and no increased operational burden because it would result in no change in claimant behavior or in procedure from the existing process.[5] The TUR indicator and new rounding method are currently implemented for the States to use; however, because the Department is implementing in regulations the TUR indicator as well as the new rounding method for the TUR look-back, the Department offers estimates of both impacts.

The UI program is a transfer payment program. For the purposes of a cost-benefit analysis under E.O.s 13563 and 12866, transfer payments are not considered a cost. Therefore, the analysis will be on the possible redistribution of wealth that may take place, as opposed to any impact on aggregate social welfare.[6] In this case, the redistribution is primarily one that takes place over time rather than between groups. More specifically, the UI program is structured to act as a counter-cyclical program in terms of its impact on the economy—during recessions increased benefit payments (much higher than taxes paid) provide temporary income support and greater economic stimulus which prevents greater economic distress, while during expansions the program acts through higher taxes to lower overall employment and demand levels. Because a State whose Trigger Value meets or exceeds the threshold and whose look-back falls short of meeting the requirement by 0.05 percentage point or less would trigger "on" under the rounding computation while under the truncation method would keep the State "off," the change marginally increases extended compensation as the TUR Trigger Value increases in a recession. A change to increase the duration of benefits during recessions will ultimately increase the counter-cyclical nature of the program by increasing stimulus during recessions while slightly decreasing economic activity during expansions. Following is an impact analysis which estimates the change in the level and timing of the UI benefits paid and taxes collected as a result of the change for the look-back provision of the TUR indicator.

The actual future impacts of changing the look-back calculation on the flow of UI benefits and taxes are dependent upon the unemployment rate in relation to the TUR trigger threshold and the number of States that have actually implemented the optional TUR indicator. Historically, the proportion of months that the EB Program has been in effect was extremely low, due primarily to a relatively high threshold in relation to the level of unemployment, unwillingness by States to adopt the optional indicators, and Federal emergency benefit programs that at times can and have supplanted the EB Program. For example, on average for the 1991 and 2001 high unemployment periods, State indicators were "on" in roughly 3 percent of the State trigger months.[7] In contrast, this past recession's high unemployment period (2007–2011) has been quite unique: In over 40 percent of the State trigger months, the EB Program has been "on," due primarily to the large number of States adopting the optional TUR indicator once the Federal Government began paying 100 percent of the costs (see Table 1).

TABLE 1—HOW OFTEN THE EXTENDED BENEFIT PROGRAM IS "ON"

High unemployment periods	State trigger months	State trigger months EB was "on"	Percent of trigger months EB was "on"
1991–1994[1]	2,226	111	5.0
2001–2004[2]	2,438	38	1.4
2007–2011[3]	2,392	1,055	44

[1] Period begins in July 1991 and goes to Dec. 1994 to include the post recessionary period of high unemployment.
[2] Period begins in Mar. 2001 and goes to Dec. 2004 to include the post recessionary period of high unemployment.
[3] Period begins in Dec. 2007 and goes to Sept. 2011 to include the post recessionary period of high unemployment.

Only seven States adopted the optional TUR indicator upon its introduction in 1993. Then from 1994 through 2008, only four more States added the TUR indicator to their State law, bringing the number to 11 at the start of 2009 (see Table 2). The number of States implementing the optional TUR indicator and how often the EB Program is actually activated are critical pieces of information for estimating the impacts of the look-back rounding methodology change. In 2009, as part of the American Recovery and Reinvestment Act (Recovery Act), the Federal government began paying 100 percent of extended compensation and high unemployment extended compensation, so the number of States that adopted the optional TUR indicator went up to 38 in 2009, then 39 in 2011.[8] All of the 28 States that adopted the TUR indicator post-Recovery Act instituted the TUR indicator on a temporary basis—for as long as the Federal government was paying 100 percent of the compensation for the EB Program.

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[5] The process of look-back calculation is done in the Division of Fiscal and Actuarial Services, Employment and Training Administration of the U.S. Department of Labor, using data from the Bureau of Labor Statistics which calculates the trigger values. The operational procedure will remain exactly the same as done previously by State and Federal staff.

[6] *See* Office of Management and Budget, *Circular A–4: Regulatory Analysis,* p. 46 (Sept. 17, 2003), *available at http://www.whitehouse.gov/omb/circulars_default.*

[7] State trigger months are the number of months during high unemployment periods (see notes to Table 1) multiplied by the number of States, *i.e.,* 53. During non-recessionary the percentage would be even less and close to zero. Extended Benefit Program data is found in the DOL ETA–394 annual report. *http://www.workforcesecurity.doleta.gov/unemploy/hb394.asp.*

[8] An additional feature of the TUR trigger that should be noted is that for claims beginning after December, 2010, Congress added a 3rd year to the look-back calculation, so that if for the most recent three-month period the TUR equals or exceeds 6.5 percent (or 8.0 percent) and the average TUR in the State equals or exceeds 110 percent of the average TUR for any or all three of the corresponding three-month periods in the 3 preceding calendar years, then EB will trigger "on." Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, Pub. L. 111–312, § 502 (Dec. 17, 2010). This feature expired on January 1, 2012, and was not included in the impact analysis.

TABLE 2—STATES THAT HAVE ADOPTED THE OPTIONAL EB TUR INDICATOR

Years	1993–1998	1999–2001	2002	2003–2004	2005–2008	2009–2010	2011
Total TUR indicator states	7	8	9	10	11	38	39
States	Alaska	New Hampshire	North Carolina	New Mexico	New Jersey	Alabama	Maryland.
	Connecticut	....	....	....	Arizona.		
	Kansas	....	....	....	California.		
	Oregon	....	....	....	Colorado.		
	Rhode Island ...	....	....	....	Delaware.		
	Vermont	....	....	....	District of Columbia.		
	Washington	....	....	....	Florida.		
					Georgia.		
					Idaho.		
					Illinois.		
					Indiana.		
					Kentucky.		
					Maine.		
					Massachusetts.		
					Michigan.		
					Minnesota.		
					Missouri.		
					Nevada.		
					New York.		
					Ohio.		
					Pennsylvania.		
					South Carolina.		
					Tennessee.		
					Texas.		
					Virginia.		
					West Virginia.		
					Wisconsin.		

Impact Assessment Methodology

ETA used two distinct methodologies, a time-series simulation and a Monte Carlo-type simulation analysis (each explained more fully below), to provide quantitative impact estimates for the change in the level and timing of the UI benefits paid and taxes collected as a result of the change in formulation of the TUR indicator. The specific goal of these two analyses is to provide a quantitative measure for: (1) The increased probability of a State turning "on" the EB Program under the new rounding rules, and (2) the likely change in the aggregate level of UI benefits and taxes with each instance of additional EB benefits paid. The results of these measures will allow a determination of the economic impact of that occurrence of additional EB benefits paid on the overall economy and on any subgroups.

The time-series simulation estimates are developed using a historical simulation methodology: By first applying the existing TUR indicator computation, and then applying the new rounding rules to data from a specified period of time and measuring the difference in outcomes. To examine the impact on outcomes, the data used is from the introduction of the optional TUR indicator in 1993 through September 2011 when this analysis was completed. This period encompasses two recessions of varying severity, two complete economic cycles, and a large number of States turning "on" the EB Program. This period also includes the temporary period of 100 percent Federal reimbursement of EB benefit payments when a majority of States, 39, adopted the TUR indicator.[9]

The baseline case is considered to be the simulated outcomes under the current TUR look-back computation for the States that had adopted the optional TUR indicator. For each month during this historical period (January 1993 through September 2011), the actual seasonally adjusted 3-month average TUR[10] was used as well as the actual look-back percentages for each State that had adopted the TUR indicator. The number of months in EB periods was then estimated for each state.[11] The TUR look-back percentage was then computed using the new rounding methodology and the analysis rerun. These computations enabled measurement of the differences between the two types of trigger formulations in the number months when the EB Program is triggered "on," and then the amount of extended benefits paid.[12]

Probability of Turning "On" EB. Using just the States that had adopted the TUR indicator, there were 2,271 monthly observations in this simulation, of which there were 1,170 instances when a State triggered "on" the EB Program by using the TUR indicator under the current methodology. When the new rounding rules were applied there were 1,177 instances—only 7 additional instances when a State would have triggered "on" EB, an increase of 0.6 percent (see Table 3).

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[9] The analysis does not include the computation of the 3 year look-back or the periods under which any State may have triggered "on" the EB Program by using the 3 year look-back. State data on adoption of the TUR trigger can be found on the weekly trigger notice at *http://www.workforcesecurity.doleta.gov/unemploy/claims_arch.asp.*

[10] The data for monthly seasonally adjusted State total unemployment rates is from Bureau of Labor Statistics LASST01000006 (*http://data.bls.gov/timeseries/LASST01000006*). The total amount of monthly EB benefits paid is from the Division of Fiscal and Actuarial Services in the Employment and Training Administration of the Department of Labor report 394 can be found here: *http://www.workforcesecurity.doleta.gov/unemploy/hb394.asp.*

[11] The "on" period was computed for each state rather than using the actual historical outcome.

[12] Under the new rounding of the look-back formulation there will only be cases when the look back percentage in either of the 2 years, will be higher than the original so the EB Program will turn "on" while the original method will have the EB Program as "off."

TABLE 3—EXTENDED BENEFIT PERIODS UNDER THE OLD AND NEW TUR INDICATOR [1]

[1993–2011]

	Estimated # of instances of EB "on"	# of instances of EB w/TUR indicator ≥ 6.0%	# of instances of EB w/TUR indicator ≥ 8.0%
Old Method	1,170	362	808
New Method	1,177	365	812

Source: Periods of EB are estimated using federal law and data from the Bureau of Labor Statistics seasonally adjusted Total Unemployment Rate series by State LASST01000006.

[1] Data consists of measuring only the periods when the EB Program triggered "on" based on the TUR indicator and included only the States that had adopted the optional TUR indicator. The number of instances refers to the number of State months.

The seven instances included six different States. In four of the instances, the State was triggering "on" because of the 8.0 percent high unemployment period. In none of the instances were there two consecutive months in which a State had a different EB triggering outcome under the new rounding methodology compared to the truncation method. Two of the instances when States triggered "on" EB due to the rounding calculation occurred following the 1991 recession, one occurred following the 2001 recession, and four occurred following the 2007 recession when 39 States had adopted the optional TUR indicator (see Table 4). In six of the seven occurrences, the difference in the look-back calculation occurred in the 2nd prior year look-back calculation.

TABLE 4—PERIODS WHEN EB WAS TRIGGERED "ON" UNDER THE NEW ROUNDING FORMULATION

State	EB Trigger date	Rounded 3-month SATUR	First year look-back truncated	Second year look-back truncated	First year look-back rounded	Second year look-back rounded
Alaska	2/28/1993	8.0	86.02	109.58	86	110
Connecticut	5/31/1993	6.8	91.89	109.67	92	110
Oregon	11/30/2003	8.0	106.66	109.58	107	110
Alaska	1/31/2009	6.8	109.67	109.67	110	110
Alabama	3/31/2011	9.2	90.19	109.52	90	110
Kansas	3/31/2011	6.8	94.44	109.67	94	110
Georgia	4/30/2011	10.0	98.03	109.89	98	110

The 0.6 percent increase in the EB Program's being "on" in this simulation represents the percentage likelihood change in the number of times that the EB Program would trigger "on" due solely to the change in formulation of the look-back mechanism for, on average, 13 States having the TUR indicator in place. Therefore, the likelihood of a State turning "on" the EB Program with the new rounding formulation may be represented by .05 percent (.6/13).

The time series estimates used the actual State unemployment rates as they occurred from 1993 through September 2011 and include only the States which had adopted the optional TUR indicator. To provide further support for the estimate of the difference in the number of times the EB Program may trigger "on" due to rounding in the look-back calculation during a recession, an additional analysis was employed based on a Monte Carlo-type methodology. The Monte-Carlo methodology allows the simulation of thousands of possible State TUR values rather than just the historical values used in the time series analysis. Thirteen States—the seven original States that adopted the optional TUR indicator and six additional randomly selected States—were chosen,[13] and then, using the mean and standard deviation of their total unemployment rates during the past four recessions,[14] one thousand TUR periods were created for each State using a random number generator with a normal distribution. The number of periods when the EB Program would trigger "on" by rounding as opposed to truncating was computed. Of the 13,000 total State observation periods (each representing recessionary periods), the EB Program would have triggered "on" in 4,822 periods using the original method of truncation for the look-back computation, while the EB Program would have triggered "on" in 4,903 periods using the method of rounding, an increase of 81 additional periods (see Table 5).

TABLE 5—DIFFERENCE BETWEEN EB TRIGGER FORMULATIONS UNDER SIMULATED RECESSIONARY TURS

[For 1,000 simulations for each State]

State [1]	Mean TUR in recession periods (%) [2]	Standard deviation of recession period [2]	Instances when EB "on" w/truncating	Instances when EB "on" w/rounding	Difference	% increase due to rounding
Alaska	8.14	1.21	448	459	11	2.40

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[13] Thirteen States were used as a number of States likely to maintain the TUR indicator in the future. The six States were randomly selected to insure a representative group from the remaining States. The six States randomly chosen were: Colorado; Delaware; Illinois; Kentucky; Maine; and Maryland.

[14] The mean and standard deviation were taken from actual monthly observations over the recession and post-recession periods of: 1980–1983; 1991–1993; 2001–2003; and 2008–2011.

TABLE 5—DIFFERENCE BETWEEN EB TRIGGER FORMULATIONS UNDER SIMULATED RECESSIONARY TURS—Continued

[For 1,000 simulations for each State]

State [1]	Mean TUR in recession periods (%) [2]	Standard deviation of recession period [2]	Instances when EB "on" w/truncating	Instances when EB "on" w/rounding	Difference	% increase due to rounding
Colorado	6.35	1.48	226	229	3	1.31
Connecticut	6.31	1.59	363	375	12	3.20
Delaware	6.23	1.80	367	371	4	1.62
Illinois	8.22	1.98	499	507	8	1.58
Kansas	5.32	1.08	119	120	1	0.83
Kentucky	8.04	2.07	510	517	7	1.35
Maine	6.70	1.48	418	425	7	1.65
Maryland	5.24	1.30	183	185	2	1.08
Oregon	8.53	2.03	512	521	9	1.73
Rhode Island	8.01	2.08	497	506	9	1.78
Vermont	5.66	1.21	221	223	2	0.90
Washington	8.06	1.95	459	465	6	1.29

[1] Original seven States to adopt the optional TUR indicator are in bold.

[2] The mean and standard deviation were taken from actual monthly TUR observations over the recession and post-recession periods of: 1980–1983; 1991–1993; 2001–2003; 2008–2011.

Across the States this represents, on average, a 1.7 percent (81/4822) increase in the likelihood of turning "on" the EB Program under the new rounding rules (see Table 6). This also represents the cumulative difference of the 13 States, meaning that each State in this simulation could be considered to have added a 0.13 percent increase of an added instance of turning "on" the EB Program (1.7/13). This value will be used as the per-State increase in the likelihood of turning "on" the EB Program under the new rounding rules in this simulation.

TABLE 6—MONTE CARLO-TYPE ANALYSIS OF DIFFERENCE IN EB TRIGGER FORMULATION

[For 1,000 simulated monthly trigger values per State]

State	# Instances EB "on" w/truncating	# Instances EB "On" w/rounding	Difference	% Difference
13 States	4,822	4,903	81	1.7
Per State Average	371	377	6	

Source: Computations made by U.S. DOL ETA/OUI/DFAS.

Transfer to EB Recipients: Temporary Income Support (During Recession)

The revision to the TUR indicator computation methodology will result in increased benefits payments during a recession, which provide temporary income support and greater economic stimulus than would otherwise exist during that economic time period. This increased economic stimulus will prevent greater economic distress during a recession. This impact is not a true benefit of the rule because, as explained above, the TUR indicator formulation would redistribute existing transfer payments only over time. That is, a change to increase extended benefits during recessions will ultimately increase the counter-cyclical nature of the program by increasing stimulus during recessions while doing the opposite during expansions.

Increased Compensation. A value for the amount of additional extended compensation and number of people who would receive the extended compensation under the rounding rules was estimated using a time-series methodology. The estimated total level of extended compensation that would have been paid under the look-back computation was estimated using a weekly survival rate method. In this methodology, for each week that the EB Program is "on," the number of State EB claimants is multiplied by the State average weekly benefit amount to get the weekly total benefit amount. To arrive at the weekly number of EB claimants, a weekly survival rate is applied for each week of EB to a beginning number of regular UI program exhaustees.[15] This was done for each week of the EB period (either 13 or 20 weeks) and aggregated to get total EB payments for the applicable period, *i.e.,* the period during which each State was "on" EB. This computation is represented in the formula below.

Computation of Total Extended Compensation Paid

Total Wkly Extended Compensation EB Benefits = Σ (Reg. Program Wkly Exhaustions[16] * Wkly Survival Rate[17]) * Avg. Wkly Benefit[18] (Summed over each week of the EB period.)

Applying this computation to the seven State periods that turned "on" the EB Program under the rounding formulation in the time series simulation, it was estimated that in total

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[15] Survival rate is the probability that a claimant will collect Unemployment Compensation from one week to the next. An exhaustee is a person collecting Unemployment Compensation who would be in their last week of compensation but for the EB Program.

[16] ETA–5159 report includes monthly regular program exhaustees which were divided by the number of weeks in a month to get weekly data.

[17] The weekly survival rate is the proportion of individuals claiming unemployment compensation in week n that will also claim unemployment compensation in week n+1. A weekly survival rate of 0.97 was used as a constant for each week of extended benefits. This level is derived from the Division of Fiscal and Actuarial Services State Benefit Forecasting Model.

[18] State average weekly benefit is derived from the ETA–5159 monthly claims report: *http://www.workforcesecurity.doleta.gov/unemploy/finance.asp.*

$294 million [19] more would have been paid out in extended compensation, and there would be an increase of 148,000 [20] new first payments in the EB Program. This translates into an estimated 1.2 percent increase ($294 million/$24,897 million—total extended compensation in the simulation) in extended compensation and a 1.5 percent increase ($148,000/$9.6 million—total EB first pays in the simulation) of EB first payments under the rounding rules compared to the current methodology (*i.e.,* truncating the look-back computation after two decimal places).

Again, dividing these results into the per State added percentage point increase for each instance of triggering "on" the EB Program means there would be a 0.17 percent increase in extended compensation paid [21] and a 0.22 percent increase [22] in first payments.

In terms of how the increased extended compensation paid would be distributed among subgroups of EB recipients, attempting to disaggregate this level of benefits into numerically small select subgroups of claimants such as low-wage workers, or minority claimants, would mean working with monetary flows of very little statistical consequence. Therefore, the Department has determined that no distributional analysis is necessary.

Transfer From State Unemployment Insurance Accounts: Increased Employer Taxes (During Expansions)

The revision to the TUR indicator computation methodology will result in increased economic stimulus during recessions. However, a significant increase in extended compensation may result in a State UI tax increase on employers. An increased UI tax on employers might result in dampened overall economic activity as employers postpone equipment purchases or hiring. This impact does not represent a true cost of the changes made in this rule because it is associated with a corresponding transfer of payments to EB recipients during recessions. That is, the regulation would result in redistribution of wealth over time (based on the counter-cyclical nature of the EB Program), rather than have a net social welfare impact.

UI Taxes. Except for the temporary provisions that are no longer in effect, Federal statutes specify that 50 percent of extended compensation is paid from the Extended Unemployment Compensation Account (EUCA) in the Unemployment Trust Fund (UTF), which is funded through the Federal Unemployment Tax Act (FUTA), and 50 percent is paid by the liable State from its account in the UTF.

The Federal monies for extended compensation flow from EUCA, which is also used to fund additional Federal emergency benefit programs. Historically, the balance of this account has been sufficient to pay the level of extended compensation during a recession and would therefore be much greater than the estimated amounts that may result from the change in the look-back mechanism.[23] Nevertheless, even if EUCA, together with the other Federal accounts in the UTF is depleted, the account can obtain advances from the General Fund with no impact on the FUTA tax, which means there would be no expected increase in Federal taxes from the change in formulation of the TUR indicator.

On the State side, every State has a tax structure that responds with higher taxes when the amount of reserves in its UTF account declines.[24] Thus, a significant increase in paid extended compensation may result in a State UI tax increase on employers. However, the tax response takes place only with relatively large changes in the State trust fund account balance, and differs by State depending on the size of the account balance; small changes in a State trust fund account balance may actually have no impact in a State's UI taxes. To gauge the magnitude of the tax impact from an increase in extended compensation paid, a generalized rule of State UI tax collections can be applied: For any specified increase in unemployment compensation, 100 percent of the increase will be collected in UI taxes over a 10-year period.[25]

Using the estimated increase of extended compensation paid (due to the TUR indicator rounding computation) from the time-series simulation, $294 million, an estimate was derived for the amount of potential State tax increases by assuming the increase in extended compensation was divided among the average number of States that experienced an increase in extended EB compensation paid over a 10-year period. To arrive at an estimate for the expected increase in State unemployment compensation taxes due to a change in the rounding rule for the look-back feature of the TUR indicator, 50 percent of the total extended compensation, $147 million, is assumed to be financed by seven States for an average of $21 million per State. The amount is assumed to be financed by increased State taxes over a 10-year period for an average of $2.1 million per year. This amount represents an estimated increase of 0.14 percent [26] in State unemployment compensation taxes for each State that turns "on" the EB Program under the new rounding rules.

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[19] This amount is, of course, dependent on the size of the States, but it does represent a reasonable estimate since these are the States most likely to have the TUR indicator in the future. Also, this amount is considered a high estimate, since 4 of the States triggered on to 20 weeks of benefits, and the average is a reasonable expected value for the level of per State extended benefits. For all of the periods except one (Alaska, 1/2009) during the State EB period triggered on by the rounding calculation, there was no "on" period for the truncation calculation. The Alaska data was adjusted for the truncation period.

[20] Estimated increase in the number of first payments in the seven state periods of triggering on EB found in the Time-series analysis.

[21] Total additional extended compensation from rounding, $294 million divided by the number of State periods, 7, and then divided by the total extended compensation for the entire period, $24,897 million.

[22] The increase in first pays due to rounding, 148,000, divided by the number of State periods, 7, and then dividing by the total number of EB first pays during the period of 9.6 million.

[23] Historical balances of the EUCA fund can be found here: *http://www.treasurydirect.gov/govt/reports/tfmp/tfmp_utf.htm.*

[24] For applicable State triggering laws see Comparison of State UI Laws: *http://www.workforcesecurity.doleta.gov/unemploy/comparison2011.asp.*

[25] Recoupment rule of UI taxes in response to a compensation increase is from an Office of Unemployment Insurance, Division of Fiscal and Actuarial Services State Revenue model run over a range of scenarios, 12/2011.

[26] Derived by taking the average estimated yearly tax increase per State, $2.1 million, divided by the estimated amount of contributions per State per year, $1.4 billion. This is certainly a very rough estimate that depends on the size of the States having the optional TUR indicator in the simulation. However, because those States would be expected to continue having the indicator, it is considered a reasonable level.

TABLE 7—ESTIMATED INCREASE IN STATE TAXES COLLECTED UNDER NEW ROUNDING FORMULATION

[Based on the estimated extended compensation from the Time-Series data, 1993–2011]

Period	Est. amt. of added extended compensation to finance[1] (mil.)	Amt. financed per state[2] (mil.)	Avg. amt. financed per year (mil.)	% Increase in taxes per state[3]
1993–2011 data period	$147	$21	$2.1	0.14

[1] Fifty percent of total estimated amount of increased extended compensation paid due to rounding from the Time-Series Data.

[2] Derived from 50 percent of the estimated increase in extended compensation payments under the Time Series data divided by the number of States that experienced an increase.

[3] Total extended compensation to be financed divided by the total unemployment compensation contributions over the period: *http://www.workforcesecurity.doleta.gov/unemploy/hb394.asp.*

In terms of specific distribution of these impacts, disaggregating the tax increases into subgroups of employers such as small businesses would mean working with monetary flows of very little consequence. Therefore, the Department has determined that no distributional analysis is necessary.

Non-Quantified Impacts

OMB Circular No. A–4 requires the identification of any non-quantifiable benefits and costs that cannot be reasonably measured.[27] One primary non-quantifiable benefit of implementing regulations for the TUR indicator and the associated rounding rule, and which is a driving factor for its adoption, is that by codifying the TUR indicator the Department will explicitly clarify a methodology for computing the TUR look-back that regulations previously left unspecified. This final rule will remove the potential for future misunderstanding in the computation of the optional TUR indicator, as compared to the current status quo where the TUR look-back computation method is not specified in Department regulations.

Regarding the secondary impacts from increased temporary income during recessions and increased employer taxes during expansions, the Department has determined that the estimates of extended compensation and UI tax increases are too small to meaningfully model their impact on the macro economy. With a likely impact of increasing the number of instances the EB Program triggers "on" by two during an average recession and nine instances during a severe recession (as computed in detail in the scenarios below), these impact numbers are too small to model any stimulus impact during a recession or a dampening effect of the tax increases during expansions. Not only are the impacts on extended compensation and taxes small compared to the U.S. economy (*e.g.,* far below the $1 billion limit for use of an economic multiplier effect on the level of employment or economic activity[28]), but even compared to aggregate unemployment compensation payments and taxes the numbers are rather insignificant.

Potential Future Stimulative and Distributional Impacts Scenarios

By increasing the overall level of benefits paid by States during recessionary periods, the change in TUR indicator computation methodology would aid in the counter-cyclical nature of the Unemployment Compensation program by increasing the economic stimulus during recessions and possibly dampening overall activity with possible higher taxes. The estimates for the increased probability of States triggering "on" the EB Program, increased benefits, higher first payments, and potential changes to UI taxes, can provide estimates for the change in flows of the Unemployment Compensation program that this proposal may cause under various future recessionary scenarios.

Scenario 1 (11 States with the optional TUR indicator; typical severity 3-year recession and post-recession period).[29] In a likely scenario, assuming a recession and post-recession high unemployment period lasting 3 years, with 11 States having the optional TUR indicator in place, it would mean 396 possible State months (11 States * 36 months) of high enough unemployment for the EB Program to trigger "on." Using the results from the high unemployment periods in the Monte Carlo-type analysis, the Department could expect approximately 147 periods of the EB Program to be triggered "on" in States with the optional TUR indicator (37 percent[30] * 396 State months) using the original truncation methodology. With 11 States having the optional TUR indicator, the likelihood of turning "on" the EB Program under the rounding methodology would be 1.4 percent (11 States * 0.13 percent per State likelihood), this would increase the number of EB Program periods by two instances (1.4 percent * 147 periods). Assuming a recession with $2 billion in total extended compensation paid and 1.5 million first payments in the EB Program, then with two more instance of the EB Program triggering "on" the Department would expect an increase in extended compensation paid of $7 million (0.34 percent * $2 billion) and an increase of 7,000 in the number of first payments (1.5 million * 0.44 percent). The resulting tax increases spread over a 10-year period in one State would then be expected to be approximately $350,000 per year (($7 million * 0.5 State cost)/10 years).

Scenario 2 (20 States with optional TUR indicator; more severe 3-year recession and post-recession period).[31] In a less likely scenario, but one with possibly the highest expected impact, assuming a recession and post-recession period lasting 3 years, with 20 States having the optional TUR indicator in place—720 State months (20 States * 36 months). In a more severe recession the Department could expect 360 periods of the EB Program to be triggered "on" with the optional TUR indicator (720 * 50 percent[32]). With 20 States having the optional TUR indicator the likelihood of triggering "on" the EB Program under the new rounding rules would be 2.6 percent (20 States * 0.13 percent[33]) this would increase the number of periods the EB Program would be triggered "on" by nine instances (2.6 percent * 360 periods). Assuming a recession with $5 billion in total extended compensation paid and 3.0 million first payments for the program,[34] with nine more instances of the EB Program triggering "on," the Department would expect an increase in extended compensation of $77 million (0.17 percent[35] * 9 periods * $5 billion) and an increase of 59,000 in the number of first payments for the program (3 million * 9 periods * 0.22 percent). The resulting tax increases spread over a 10-year period in one State would then be expected to be approximately $190,000 per year ($77 million * 0.5 State cost)/20 States)/10 years).

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[27] *See* Office of Management and Budget, *Circular A–4: Regulatory Analysis,* pp. 2–3, 10, 26–27 (Sept. 17, 2003), *available at http://www.whitehouse.gov/omb/circulars_default.*

[28] In OMB Circular A–4 in reference to the size of stimulative impacts: ". . . that rules with annual costs that are less than one billion dollars are likely to have a minimal effect on economic growth."

[29] Similar in severity to the 1991 recession.

[30] A value similar to the percentage of State months that triggered on to EB in the 1991 and 2001 recessions.

[31] Similar in severity to the 2007 recession.

[32] Assumed likelihood of triggering on EB in a severe recession.

[33] Calculated likelihood of triggering on EB in the severe recession for States with optional TUR trigger under the new rounding rules.

Impact of the TUR Option

The preceding impact analysis focused on changing the computational methodology of the TUR look-back provision. Since the Department is not considering the removal of the optional TUR indicator, the analysis does not measure the impact of the original adoption of the TUR indicator in 1992. However, it should be noted that a review of the most evident differences caused by the implementation of this option shows a rather small impact.

From 1993 to 2006, for the 11 States that adopted the TUR indicator by 2006 (Table 2), EB costs are totaled for each period when one of these States triggered on to the EB Program with the TUR option but would not have turned on extended compensation under the IUR option.[36] During this 14-year period, there were 28 instances when a State triggered on to the EB Program using the TUR option and would not have triggered on using the IUR trigger. The total extended compensation costs of these instances were approximately $310 million and the number of First Payments was 330,000.

TABLE 8—STATES TRIGGERING ON TO THE EB PROGRAM USING THE TUR OPTION

[Without qualifying with the IUR Option]

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Alaska	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska,	Alaska	Alaska	Alaska	Alaska	Alaska	Alaska.	
Oregon	Oregon	Rhode Is.								N. Carolina	Michigan	Michigan.	
Rhode Is	Rhode Is,									Oregon	N. Carolina	Oregon.	
Washington.											Oregon	Washington.	
											Washington.		

This is a relatively small number of States and amount spent, on average approximately $22 million per year, and in no year did the amount spent on extended compensation from States that triggered on using the TUR option ever exceed $100 million. Indeed, measuring the change in cyclical financial flows of the UI program does not seem necessary under these aggregates.

Conclusion

Placing the optional TUR indicator in regulations does not impose any additional change in burden, since no change in the operational procedure will occur. In addition, it incorporates in regulations the computational methodology previously communicated in UIPL No. 16–11 for the TUR's look-back.

Changing the look-back computation does have an impact, although it is estimated to be small. For each State that adopted the optional TUR indicator, it was found that the new rounding rule would likely add a 0.13 percentage point increase in the likelihood of a single State triggering "on" the EB Program during a recession. For each State that triggered "on" the EB Program, it would likely add a 0.17 percent increase in the level of extended compensation paid, a 0.22 percent increase in people receiving extended compensation, and a per State increase in unemployment compensation taxes of 0.14 percent per year. These numbers indicate a negligible impact on the redistribution of the flows (unemployment compensation and taxes) in the Unemployment Compensation program. These impacts are so small that any stimulative or distributional effects would be considered of little consequence. Indeed, the probable economic impact encompasses the likely possibility (depending on the future level of the TUR) that there would be no measurable impact from a change in the derivation of the TUR indicator due to rounding the look-back proportion as opposed to truncating that value.

Paperwork Reduction Act

The purposes of the Paperwork Reduction Act of 1995 (PRA), 44 U.S.C. 3501 *et seq.*, include minimizing the paperwork burden on affected entities. The PRA requires certain actions before an agency can adopt or revise a collection of information, including publishing a summary of the collection of information and a brief description of the need for and proposed use of the information.

A Federal agency may not conduct or sponsor a collection of information unless it is approved by OMB under the PRA, and displays a currently valid OMB control number, and the public is not required to respond to a collection of information unless it displays a currently valid OMB control number. Also, notwithstanding any other provisions of law, no person shall be subject to penalty for failing to comply with a collection of information if the collection of information does not display a currently valid OMB control number (44 U.S.C. 3512).

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[34] Calculated from average costs and payments made during recessions 1980–2001.

[35] Assumed likelihood of triggering on EB in this type of recession.

[36] For a state to trigger on extended compensation using the IUR, its insured unemployment rate (IUR) for the previous 13 weeks is at least 5 percent and is 120 percent of the average of the rates for the corresponding 13-week period in each of the 2 previous years.

The Department published an NPRM on October 27, 2014, in the **Federal Register** (79 FR 63859). The NPRM proposed to amend 20 CFR 615, Extended Benefits, by implementing the TUR indicator, an optional calculation methodology for triggering on Extended Benefits, in regulations. The NPRM also proposed to revise the regulatory requirements at § 615.15, pertaining to records and reports State agencies must submit. More specifically, paragraphs (a) and (b) were proposed to be revised for clarity by deleting unnecessary language regarding the Secretary's authority to request Extended Benefit Program reports and to appoint audit officials for those reports. Furthermore, for reasons discussed in the Review of the Final Rule, the Department proposed to delete paragraphs (c) and (d). The reporting instructions for the proper and timely submission of data are provided in ET Handbook No. 401, which governs Unemployment Compensation required reporting.

The preamble to the NPRM stated that the Department had determined the proposed rule did not contain new information collections. However, to ensure transparency and full opportunities for public participation under all appropriate authorities, the Department is submitting an Information Collection Request (ICR) to the Office of Management and Budget (OMB) to revise the PRA approval for the information collections to reflect this rulemaking. See 44 U.S.C. 3506(c)(2)(B); 5 CFR 1320.11. As part of that process, the Department sought public comments on the removal of specific information collection requirements in the NPRM and on the general Extended Benefit reporting requirements in Handbook 401 and Forms ETA 538 and 539 in light of specific areas of interest to minimize so-called "paperwork" burdens on the public. The Department published a notice in the **Federal Register** on July 7, 2015 (80 FR 38747) to provide the public a 60-day opportunity to comment on the information collections as described in the rule. No comments on the ICR were received during the public comment period.

Concurrent with the publication of this final rule, the Department is submitting an ICR to OMB for approval. The Department will publish a **Federal Register** notice upon receipt of OMB's notice of approval.

Overview of the Information Collection

Agency: DOL–ETA.

Action: ICR Revision.

Title of Collection: Weekly Claims and Extended Benefits Data and Weekly Initial and Continued Weeks Claimed.

OMB Control Number: 1205–0028.

Affected Public: State, Local, and Tribal Governments.

Total Estimated Number of Respondents: 53.

Total Estimated Number of Responses: 5,512.

Total Estimated Annual Time Burden: 3,675 hours.

Total Estimated Annual Other Costs Burden: $0.

Executive Order 13132

Section 6 of Executive Order 13132 requires Federal agencies to consult with State entities when a regulation or policy may have a substantial direct effect on the States or the relationship between the National Government and the States, or the distribution of power and responsibilities among the various levels of government, within the meaning of the Executive Order. Section 3(b) of the Executive Order further provides that Federal agencies must implement regulations that have a substantial direct effect only if statutory authority permits the regulation and it is of national significance.

This final rule does not have a substantial direct effect on the States or the relationship between the National Government and the States, or the distribution of power and responsibilities among the various levels of Government, within the meaning of the Executive Order 13132. Any action taken by a State as a result of the final rule would be at its own discretion as the rule imposes no requirements.

Unfunded Mandates Reform Act of 1995

This regulatory action has been reviewed in accordance with the Unfunded Mandates Reform Act of 1995 (Reform Act). Under the Reform Act, a Federal agency must determine whether a regulation proposes a Federal mandate that would result in the increased expenditures by State, local, or tribal governments, in the aggregate, or by the private sector, of $100 million or more in any single year. The Department has determined this final rule does not include any Federal mandate that may result in increased expenditure by State, local, and Tribal governments in the aggregate of more than $100 million, or increased expenditures by the private sector of more than $100 million.

Accordingly, it is unnecessary for the Department to prepare a budgetary impact statement. Further, as noted above in the conclusion of the economic impact analysis, the impact is positive for State UTF accounts.

Effect on Family Life

The Department certifies that this final rule has been assessed according to section 654 of the Treasury and General Government Appropriations Act, enacted as part of the Omnibus Consolidated and Emergency Supplemental Appropriations Act of 1999 (Pub. L. 105–277, 112 Stat. 2681), for its effect on family well-being. It will not adversely affect the well-being of the nation's families. Therefore, the Department certifies that this final rule does not adversely impact family well-being.

Regulatory Flexibility Act/SBREFA

The Regulatory Flexibility Act (RFA) at 5 U.S.C. 603(a) requires agencies to prepare and make available for public comment an initial regulatory flexibility analysis which will describe the impact of the final rule on small entities. Section 605 of the RFA allows an agency to certify a rule, in lieu of preparing an analysis, if the final rulemaking is not expected to have a significant economic impact on a substantial number of small entities. Furthermore, under the Small Business Regulatory Enforcement Fairness Act of 1996, 5 U.S.C. 801 (SBREFA), an agency is required to produce compliance guidance for small entities if the rule has a significant economic impact on a substantial number of small entities.

The RFA defines small entities as small business concerns, small not-for-profit enterprises, or small governmental jurisdictions. The final rule does not regulate small entities. As a result, any indirect impact on small entities would be from a tax increase resulting from a State triggering "on" because of the new computation method for the look-back. Therefore, the Department certifies that the final rule will not have a significant economic impact on a substantial number of these small entities.

Plain Language

The Department drafted this final rule in plain language.

List of Subjects in 20 CFR Part 615

Grant programs-labor; Reporting and recordkeeping requirements; Unemployment compensation.

For the reasons discussed in the preamble, ETA amends 20 CFR part 615 as follows:

PART 615—EXTENDED BENEFITS IN THE FEDERAL-STATE UNEMPLOYMENT COMPENSATION PROGRAM

■ 1. The authority citation for part 615 is revised to read as follows:

Authority: 26 U.S.C. 7805; 26 U.S.C. 1102; Secretary's Order No. 6–10.

■ 2. Revise § 615.1 to read as follows:

§ 615.1 Purpose.

This part implements the "Federal-State Extended Unemployment Compensation Act of 1970" (EUCA). Under the Federal Unemployment Tax Act, 26 U.S.C. 3304(a)(11), an approved State law must provide for the payment of extended compensation to eligible individuals who have exhausted all rights to regular compensation during specified periods of unemployment, as prescribed in EUCA and this part.

§§ 615.3, 615.4, 615.7, 616.8, 615.9, 615.12, and 615.14 [Amended]

■ 3. In part 615 remove the words "the Act" and add in their place the acronym "EUCA" in the following places:
■ a. Section 615.3 (four places);
■ b. Section 615.4(a) and (b) introductory text;
■ c. Section 615.8(a) introductory text;
■ d. Section 615.8(c) introductory text;
■ e. Section 615.8(c)(2);
■ f. Section 615.8(d) introductory text;
■ g. Section 615.8(d)(3) (two places);
■ h. Section 615.8(d)(4);
■ i. Section 615.8(e) introductory text;
■ j. Section 615.8(e)(8);
■ k. Section 615.8(f)(1) introductory text;
■ l. Section 615.8(f)(1)(ii);
■ m. Section 615.8(f)(4);
■ n. Section 615.8(g)(1) and (5);
■ o. Section 615.9(d);
■ p. Section 615.14(a)(1) through (4);
■ q. Section 615.14(b) introductory text;
■ r. Section 615.14(c)(1);
■ s. Section 615.14(c)(2) (two places);
■ t. Section 615.14(c)(3) introductory text;
■ u. Section 615.14(c)(5) and (6);
■ v. Section 615.14(c)(7)(i) through (iii);
■ w. Section 615.14(d)(1);
■ x. Section 615.14(d)(2) (two places);
■ y. Section 615.14(d)(3)(four places);
■ z. Section 615.14(d)(6); and

■ 4. Revise § 615.2 to read as follows:

§ 615.2 Definitions.

For the purposes of the EUCA and this part—

Additional compensation means compensation totally financed by a State and payable under a State law by reason of conditions of high unemployment or by reason of other special factors and, when so payable, includes compensation payable pursuant to 5 U.S.C. chapter 85.

And, as used in section 202(a)(3)(D)(ii), shall be interpreted to mean "or".

Applicable benefit year means, with respect to an individual, the current benefit year if, at the time an initial claim for extended compensation is filed, the individual has an unexpired benefit year only in the State in which such claim is filed, or, in any other case, the individual's most recent benefit year. For this purpose, the most recent benefit year for an individual who has unexpired benefit years in more than one State when an initial claim for extended compensation is filed, is the benefit year with the latest ending date or, if such benefit years have the same ending date, the benefit year in which the latest continued claim for regular compensation was filed. The individual's most recent benefit year which expires in an extended benefit period, when either extended compensation or high unemployment extended compensation is payable, is the applicable benefit year if the individual cannot establish a second benefit year or is precluded from receiving regular compensation in a second benefit year solely by reason of a State law provision which meets the requirement of section 3304(a)(7) of the Internal Revenue Code of 1986 (26 U.S.C. 3304(a)(7)).

Applicable State means, with respect to an individual, the State with respect to which the individual is an "exhaustee" as defined in § 615.5, and in the case of a combined wage claim for regular compensation, the term means the "paying State" as defined in § 616.6(e) of this chapter.

Applicable State law means the law of the State which is the applicable State for an individual.

Average weekly benefit amount, for the purposes of section 202(a)(3)(D)(i), means the weekly benefit amount (including dependents' allowances payable for a week of total unemployment and before any reduction because of earnings, pensions or other requirements) applicable to the week in which the individual failed to take an action which results in a disqualification as required by section 202(a)(3)(B) of the EUCA.

Base period means, with respect to an individual, the base period as determined under the applicable State law for the individual's applicable benefit year.

Benefit structure as used in section 204(a)(2)(D), for the requirement to round down to the "nearest lower full dollar amount" for Federal reimbursement of sharable regular and sharable extended compensation means all of the following:

(1) Amounts of regular weekly benefit payments,

(2) Amounts of additional and extended weekly benefit payments,

(3) The State maximum or minimum weekly benefit,

(4) Partial and part-total benefit payments,

(5) Amounts payable after deduction for pensions, and

(6) Amounts payable after any other deduction required by State law.

Benefit year means, with respect to an individual, the benefit year as defined in the applicable State law.

Claim filed in any State under the interstate benefit payment plan, as used in section 202(c), means:

(1) Any interstate claim for a week of unemployment filed pursuant to the Interstate Benefit Payment Plan, but does not include—

(i) A claim filed in Canada,

(ii) A visiting claim filed by an individual who has received permission from his/her regular reporting office to report temporarily to a local office in another State and who has been furnished intrastate claim forms on which to file claims, or

(iii) A transient claim filed by an individual who is moving from place to place searching for work, or an intrastate claim for Extended Benefits filed by an individual who does not reside in a State that is in an Extended Benefit Period,

(2) *The first 2 weeks,* as used in section 202(c), means the first 2 weeks for which the individual files compensable claims for Extended Benefits under the Interstate Benefit Payment Plan in an agent State in which an Extended Benefit Period is not in effect during such weeks.

Compensation and *unemployment compensation* means cash benefits (including dependents' allowances) payable to individuals with respect to their unemployment, and includes regular compensation, additional compensation and extended compensation as defined in this section.

Date of a disqualification, as used in section 202(a)(4), means the date the disqualification begins, as determined under the applicable State law.

Department means the United States Department of Labor, and shall include the Employment and Training Administration, the agency of the United States Department of Labor headed by the Assistant Secretary of Labor for Employment and Training to whom has been delegated the

Secretary's authority under the EUCA in Secretary's Order No. 6–2010 (75 FR 66268) or any subsequent order.

Eligibility period means, for an individual, the period consisting of—

(1) The weeks in the individual's applicable benefit year which begin in an extended benefit period or high unemployment period, or for a single benefit year, the weeks in the benefit year which begin in more than one extended benefit period or high unemployment period, and

(2) If the applicable benefit year ends within an extended benefit period or high unemployment period, any weeks thereafter which begin in such extended benefit period or high unemployment period,

(3) An individual may not have more than one eligibility period for any one exhaustion of regular benefits, or carry over from one eligibility period to another any entitlement to extended compensation.

Employed, for the purposes of section 202(a)(3)(B)(ii) of the EUCA, and *employment,* for the purposes of section 202(a)(4) of the EUCA, mean service performed in an employer-employee relationship as defined in the State law; and that law also shall govern whether that service must be covered by it, must consist of consecutive weeks, and must consist of more weeks of work than are required under section 202(a)(3)(B) of the EUCA.

EUCA means the Federal-State Extended Unemployment Compensation Act of 1970, title II of Public Law 91–373, 84 Stat. 695, 708 (codified in note to 26 U.S.C. 3304), as amended.

Extended benefit period means the weeks during which extended compensation is payable in a State in accordance with § 615.11.

Extended Benefits Program or *EB Program* means the entire program under which monetary payments are made to workers who have exhausted their regular compensation during periods of high unemployment.

Extended compensation or *extended benefits* means the funds payable to an individual for weeks of unemployment which begin in a regular EB period or high unemployment period (HUP), under those provisions of a State law which satisfy the requirements of EUCA and this part with respect to the payment of extended unemployment compensation, and, when so payable, includes compensation payable under 5 U.S.C. chapter 85, but does not include regular compensation or additional compensation.

Extended compensation account is the account established for each individual claimant for the payment of regular extended compensation or high unemployment extended compensation.

Extended unemployment compensation means:

(1) Regular extended compensation paid to an eligible individual under those provisions of a State law which are consistent with EUCA and this part, and that does not exceed the smallest of the following:

(i) 50 percent of the total amount of regular compensation payable to the individual during the applicable benefit year; or

(ii) 13 times the individual's weekly amount of extended compensation payable for a week of total unemployment, as determined under § 615.6(a); or

(iii) 39 times the individual's weekly benefit amount, referred to in paragraph (1)(ii) of this definition, reduced by the regular compensation paid (or deemed paid) to the individual during the applicable benefit year; or

(2) High unemployment extended compensation paid to an eligible individual under an optional TUR indicator enacted under State law when the State is in a high unemployment period, in accordance with § 615.11(e) of this part, and that does not exceed the smallest of the following:

(i) 80 percent of the total amount of regular compensation payable to the individual during the applicable benefit year; or

(ii) 20 times the individual's weekly amount of extended compensation payable for a week of total unemployment, as determined under § 615.6(a); or

(iii) 46 times the individual's weekly benefit amount, referred to in paragraph (1)(ii) of this definition, reduced by the regular compensation paid (or deemed paid) to the individual during the applicable benefit year.

Gross average weekly remuneration, for the purposes of section 202(a)(3)(D)(i), means the remuneration offered for a week of work before any deductions for taxes or other purposes and, in case the offered pay may vary from week to week, it shall be determined on the basis of recent experience of workers performing work similar to the offered work for the employer who offered the work.

High unemployment extended compensation means the benefits payable to an individual for weeks of unemployment which begin in a high unemployment period, under those provisions of a State law which satisfy the requirements of EUCA and this part for the payment of high unemployment extended compensation. When so payable, high unemployment extended compensation includes compensation payable under 5 U.S.C. chapter 85, but does not include regular compensation or additional compensation. Regular extended unemployment compensation, along with high unemployment extended compensation, are part of the program referred to in this part as Extended Benefits.

High unemployment period (or HUP) means a period where the Department determines that the Trigger Value in a State, which has enacted the alternative Total Unemployment Rate indicator in law, for the most recent 3 months for which data for all States is published, equals or exceeds 8 percent and such Trigger Value equals or exceeds 110 percent of such Trigger Value for either or both of the corresponding 3-month periods ending in the 2 preceding calendar years.

Hospitalized for treatment of an emergency or life-threatening condition, as used in section 202(a)(3)(A)(ii), has the following meaning: "Hospitalized for treatment" means an individual was admitted to a hospital as an inpatient for medical treatment. Treatment is for an "emergency or life threatening condition" if determined to be such by the hospital officials or attending physician that provide the treatment for a medical condition existing upon or arising after hospitalization. For purposes of this definition, the term "medical treatment" refers to the application of any remedies which have the objective of effecting a cure of the emergency or life-threatening condition. Once an "emergency condition" or a "life-threatening condition" has been determined to exist by the hospital officials or attending physician, the status of the individual as so determined shall remain unchanged until release from the hospital.

Individual's capabilities, for the purposes of section 202(a)(3)(C), means work which the individual has the physical and mental capacity to perform and which meets the minimum requirements of section 202(a)(3)(D).

Insured Unemployment Rate means the percentage derived by dividing the average weekly number of individuals filing claims for regular compensation in a State for weeks of unemployment in the most recent 13-consecutive-week period as determined by the State on the basis of State reports to the United States Secretary of Labor by the average monthly employment covered under State law for the first 4 of the most recent 6 completed calendar quarters before the end of such 13-week period.

Jury duty, for purposes of section 202(a)(3)(A)(ii), means the performance of service as a juror, during all periods of time an individual is engaged in such service, in any court of a State or the United States pursuant to the law of the State or the United States and the rules of the court in which the individual is engaged in the performance of such service.

Provisions of the applicable State law, as used in section 202(a)(3)(D)(iii) of EUCA, means that State law provisions must not be inconsistent with sections 202(a)(3)(C) and 202(a)(3)(E). Therefore, decisions based on State law provisions must not require an individual to take a job which requires traveling an unreasonable distance to work, or which involves an unreasonable risk to the individual's health, safety or morals. Such State law provisions must also include labor standards and training provisions required under sections 3304(a)(5) and 3304(a)(8) of the Internal Revenue Code of 1986 and section 236(d) of the Trade Act of 1974.

Reasonably short period, for the purposes of section 202(a)(3)(C), means the number of weeks provided by the applicable State law.

Regular compensation means compensation payable to an individual under a State law, and, when so payable, includes compensation payable pursuant to 5 U.S.C. chapter 85, but does not include extended compensation or additional compensation.

Regular extended compensation means the benefits payable to an individual for weeks of unemployment which begin in an extended benefit period, under those provisions of a State law which satisfy the requirements of EUCA and this part for the payment of extended unemployment compensation, and, when so payable, includes compensation payable under 5 U.S.C. chapter 85, but does not include regular compensation or additional compensation. Regular extended compensation, along with high unemployment extended compensation, are part of the program referred to in this part as Extended Benefits.

Regular EB period means a period in which a state is "on" the EB Program because either the mandatory or optional IUR indicator satisfies the criteria to be "on" and the state is not in a 13-week mandatory "off" period; or the State is "on" the EB Program because the TUR indicator's Trigger Value is at least 6.5 percent and it is at least 110 percent of the Trigger Value for the comparable 3 months in either of the prior 2 years.

Secretary means the Secretary of Labor of the United States.

Sharable compensation means:

(1) Extended compensation paid to an eligible individual under those provisions of a State law which are consistent with EUCA and this part, and that does not exceed the smallest of the following:

(i) 50 percent of the total amount of regular compensation payable to the individual during the applicable benefit year; or

(ii) 13 times the individual's weekly amount of extended compensation payable for a week of total unemployment, as determined under § 615.6(a); or

(iii) 39 times the individual's weekly benefit amount, referred to in paragraph (1)(ii) of this definition, reduced by the regular compensation paid (or deemed paid) to the individual during the applicable benefit year.

(2) Extended compensation paid to an eligible individual under an optional TUR indicator enacted under State law when the State is in a high unemployment period, in accordance with § 615.12(f) of this part, and that does not exceed the smallest of the following:

(i) 80 percent of the total amount of regular compensation payable to the individual during the applicable benefit year; or

(ii) 20 times the individual's weekly amount of extended compensation payable for a week of total unemployment, as determined under § 615.6(a); or

(iii) 46 times the individual's weekly benefit amount, referred to in paragraph (1)(ii) of this definition, reduced by the regular compensation paid (or deemed paid) to the individual during the applicable benefit year.

(3) Regular compensation paid to an eligible individual for weeks of unemployment in the individual's eligibility period, but only to the extent that the sum of such compensation, plus the regular compensation paid (or deemed paid) to the individual for prior weeks of unemployment in the applicable benefit year, exceeds 26 times and does not exceed 39 times the average weekly benefit amount (including allowances for dependents) for weeks of total unemployment payable to the individual under the State law in such benefit year: Provided, that such regular compensation is paid under provisions of a State law which are consistent with EUCA and this part.

(4) Notwithstanding the preceding provisions of this paragraph, sharable compensation does not include any regular or extended compensation for which a State is not entitled to a payment under section 202(a)(6) or 204 of EUCA or § 615.14 of this part.

State means the States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, and the U. S. Virgin Islands.

State agency means the State unemployment compensation agency of a State which administers the State law.

State law means the unemployment compensation law of a State, approved by the Secretary under section 3304(a) of the Internal Revenue Code of 1986 (26 U.S.C. 3304(a)).

A *systematic and sustained effort,* for the purposes of section 202(a)(3)(E), means—

(i) A high level of job search activity throughout the given week, compatible with the number of employers and employment opportunities in the labor market reasonably applicable to the individual,

(ii) A plan of search for work involving independent efforts on the part of each individual which results in contacts with persons who have the authority to hire or which follows whatever hiring procedure is required by a prospective employer in addition to any search offered by organized public and private agencies such as the State employment service or union or private placement offices or hiring halls,

(iii) Actions by the individual comparable to those actions by which jobs are being found by people in the community and labor market, but not restricted to a single manner of search for work such as registering with and reporting to the State employment service and union or private placement offices or hiring halls, in the same manner that such work is found by people in the community,

(iv) A search not limited to classes of work or rates of pay to which the individual is accustomed or which represent the individual's higher skills, and which includes all types of work within the individual's physical and mental capabilities, except that the individual, while classified by the State agency as provided in § 615.8(d) as having "good" job prospects, shall search for work that is suitable work under State law provisions which apply to claimants for regular compensation (which is not sharable),

(v) A search by every claimant, without exception for individuals or classes of individuals other than those in approved training, as required under section 3304(a)(8) of the Internal Revenue Code of 1986 or section 236(e) of the Trade Act of 1974,

(vi) A search suspended only when severe weather conditions or other calamity forces suspension of such activities by most members of the community, except that

(vii) The individual, while classified by the State agency as provided in § 615.8(d) as having "good" job prospects, if such individual normally obtains customary work through a hiring hall, shall search for work that is suitable work under State law provisions which apply to claimants for regular compensation (which is not sharable).

Tangible evidence of an active search for work, for the purposes of section 202(a)(3)(E), means a written record which can be verified, and which includes the actions taken, methods of applying for work, types of work sought, dates and places where work was sought, the name of the employer or person who was contacted and the outcome of the contact.

Total Unemployment Rate means the number of unemployed individuals in a State (seasonally adjusted) divided by the civilian labor force (seasonally adjusted) in the State for the same period.

Trigger Value or *average rate of total unemployment* means the ratio computed using 3 months of the level of seasonally adjusted unemployment in a State in the numerator and 3 months of the level of the seasonally adjusted civilian labor force in the State in the denominator. This rate is used for triggering States "on" and "off" the optional Total Unemployment Rate indicator as described in § 615.12(e).

Week means:

(1) For purposes of eligibility for and payment of extended compensation, a week as defined in the applicable State law.

(2) For purposes of computation of extended compensation "on" and "off" and "no change" indicators and insured unemployment rates and the beginning and ending of an EB Period or a HUP, a calendar week.

Week of unemployment means:

(1) A week of total, part-total, or partial unemployment as defined in the applicable State law, which shall be applied in the same manner and to the same extent to the Extended Benefit Program as if the individual filing a claim for Extended Benefits were filing a claim for regular compensation, except as provided in paragraph (2) of this definition.

(2) *Week of unemployment* in section 202(a)(3)(A) of the EUCA means a week of unemployment, as defined in paragraph (1) of this definition, for which the individual claims Extended Benefits or sharable regular benefits.

■ 5. Amend § 615.3 by revising the third sentence to read as follows:

§ 615.3 Effective period of the program.

* * * Conformity with EUCA and this part in the payment of regular compensation, regular extended compensation, and high unemployment extended compensation (if State law so provides) to any individual is a continuing requirement, applicable to every week as a condition of a State's entitlement to payment for any compensation as provided in EUCA and this part.

■ 6. Amend § 615.7 by adding paragraph (b)(3) and revising paragraph (d) introductory text to read as follows:

§ 615.7 Extended Benefits; maximum amount.

* * * * *

(b) * * *

(3) If State law provides, in accordance with § 615.12(e), for a high unemployment period for weeks of unemployment beginning after March 6, 1993, the provisions of paragraph (b)(1) of this section are applied by substituting:

(i) 80 percent for 50 percent in (b)(1)(i),

(ii) 20 for 13 in (b)(1)(ii), and

(iii) 46 for 39 in (b)(1)(iii).

Note to paragraph (b)(3). *Provided*, that if an individual's extended compensation account is determined in accordance with the provisions of paragraphs (b)(3)(i) through (b)(3)(iii) (for a "high unemployment period" as defined in § 615.2) during the individual's eligibility period, upon termination of the high unemployment period, such individual's account must be reduced by the amount in the account that is more than the maximum amount of extended compensation or high extended compensation payable to the individual. *Provided further*, if the account balance is equal to or less than the maximum amount of extended compensation or high unemployment extended compensation payable, there will be no reduction in the account balance upon termination of a high unemployment period. In no case will the individual receive more regular extended compensation or high unemployment extended compensation than the amount determined in accordance with paragraphs (b)(1)(i) through (iii) of this section, nor more extended compensation or high unemployment extended compensation than as provided in paragraphs (b)(2)(i) through (iii) of this section.

* * * * *

(d) *Reduction because of trade readjustment allowances.* Section 233(c) of the Trade Act of 1974 (and section 204(a)(2)(C) of EUCA), requiring a reduction of extended compensation because of the receipt of trade readjustment allowances, must be applied as follows:

* * * * *

■ 7. Amend § 615.8 by revising paragraphs (e)(5)(iii), (f)(2)(i) and (iii), and (h)(3) and (4) to read as follows:

§ 615.8 Provisions of State law applicable to claims.

* * * * *

(e) * * *

(5) * * *

(iii) The work pays less than the higher of the minimum wage set in section 6(a)(1) of the Fair Labor Standards Act of 1938, or any applicable State or local minimum wage, without regard to any exemption elsewhere in those laws, or

* * * * *

(f) * * *

(2) * * *

(i) The gross average weekly remuneration for the work for any week does not exceed the sum of the individual's weekly benefit amount plus any supplemental unemployment compensation benefits (as defined in section 501(c)(17)(D) of the Internal Revenue Code of 1986) payable to the individual,

* * * * *

(iii) The work pays less than the higher of the minimum wage set in section 6(a)(1) of the Fair Labor Standards Act of 1938, or any applicable State or local minimum wage, without regard to any exemption elsewhere in those laws, or

* * * * *

(h) * * *

(3) What kind of jobs he/she must be actively engaged in seeking each week depending on the classification of his/her job prospects, and what tangible evidence of such search must be furnished to the State agency with each claim for benefits. In addition, the State must inform the claimant that he/she is required to apply for and accept suitable work, and

(4) The resulting disqualification if he/she fails to apply for work to which referred, or fails to accept work offered, or fails to actively engage in seeking work or to furnish tangible evidence of such search for each week for which extended compensation or sharable regular benefits is claimed, beginning with the week following the week in which such information shall be furnished in writing to the individual.

■ 8. Revise § 615.11 to read as follows:

§ 615.11 Extended Benefit Periods.

(a) *Beginning date.* Except as provided in paragraph (d) of this section, an extended benefit period or high unemployment period begins in a State on the first day of the third calendar week after a week for which there is a

State "on" indicator in that State under either § 615.12(a) or (b).

(b) *Ending date.* Except as provided in paragraphs (c) and (e) of this section, an extended benefit period or high unemployment period in a State ends on the last day of the third week after the first week for which there is a State "off" indicator in that State, unless another indicator is in "on" status.

(c) *Duration.* When an extended benefit period and/or high unemployment period becomes effective in any State, or triggers "off," the attained status must continue in effect for not less than 13 consecutive weeks.

(d) *Limitation.* No extended benefit period or high unemployment period may begin or end in any State before the most recent week for which data used to trigger the State "on" or "off" or "no change" indicator has been published.

(e) *Specific applications of the 13-week rule.* (1) If a State concludes a 13-week mandatory "on" period by virtue of the IUR indicator which, at the end of the 13-week period no longer satisfies the requirements for a State to be "on," the extended benefit period continues if the TUR indicator is "on" during the 11th week of the 13-week mandatory "on" period.

(2) If a State concludes a 13-week mandatory "on" period by virtue of the TUR indicator which, at the end of the 13-week period no longer satisfies the requirements for a State to be "on," the extended benefit period continues if the IUR indicator is "on" during the 11th week of the 13-week mandatory "on" period.

(f) *Determining if a State remains "off" as a result of a total unemployment rate indicator after the 13-week mandatory "off" period ends.* (1) The State remains "off" if there is not an IUR "on" indicator the 11th week of the 13-week mandatory "off" period, and there is a TUR "off" indicator for the third week before the last week of the 13-week mandatory "off" period.

■ 9. Amend § 615.12 by:

■ a. Revising paragraphs (d)(1) and (2);

■ b. Adding paragraph (d)(3);

■ c. Redesignating paragraph (e) as paragraph (f) and revising it; and

■ d. Adding new paragraph (e).

The additions and revisions read as follows:

§ 615.12 Determination of "on" and "off" indicators.

* * * * *

(d) * * *

(1) Any determination by the head of a State agency of an "on" or "off" or "no change" IUR indicator may not be corrected more than three weeks after the close of the week to which it applies. If any figure used in the computation of a rate of insured unemployment is later found to be wrong, the correct figure must be used to redetermine the rate of insured unemployment and the 120 percent factor for that week and all later weeks, but no determination of previous "on" or "off" or "no change" indicator shall be affected unless the redetermination is made within the time the indicator may be corrected under the first sentence of this paragraph (d)(1). Any change is subject to the concurrence of the Department as provided in paragraph (e) of this section.

(2) The initial release of the TUR by the Bureau of Labor Statistics (BLS) is subject to revision. However, once a State's TUR indicator is determined using the initial release of the TUR data, it is not subject to revision even if the BLS TUR for that period of time is revised.

(3) The "on" period under a State's optional IUR or TUR indicator may not begin before the later of the date of the State's adoption of the optional insured unemployment rate or total unemployment rate indicator, or the effective date of that enactment. The "off" period under a State's optional insured unemployment rate or total unemployment rate indicator may not occur until after the effective date of the repeal of the optional insured unemployment rate or total unemployment rate indicator from State law.

(e) *Other optional indicators.* (1) A State may, as an option, in addition to the State indicators in paragraphs (a) and (b) of this section, provide by its law that there is a State "on" or "off" indicator in the State for a week if we determine that—

(i) The Trigger Value in such State computed using the most recent 3 months for which data for all States are published before the close of such week equals or exceeds 6.5 percent; and

(ii) The Trigger Value computed using data from the 3-month period referred to in paragraph (e)(1)(i) of this section equals or exceeds 110 percent of the Trigger Value for either (or both) of the corresponding 3-month periods ending in the 2 preceding calendar years. This "look-back" is computed by dividing the Trigger Value by the same measure for the corresponding 3 months in each of the applicable prior years, and the resulting decimal fraction is rounded to the hundredths place, multiplied by 100 and reported as an integer and compared to the statutory threshold to help determine the State's EB Program status; and

(iii) There is a State "off" indicator for a week if either the requirements of paragraph (e)(1)(i) or (ii) of this section are not satisfied.

(2) Where a State adopts the optional indicator under paragraph (e)(1) of this section, there is a State "on" indicator for a high unemployment period (as defined in § 615.2) under State law if—

(i) The Trigger Value in the State computed using the most recent 3 months for which data for all States are published before the close of such week equals or exceeds 8.0 percent, and

(ii) The Trigger Value in the State computed using data from the 3-month period referred to in paragraph (e)(2)(i) of this section equals or exceeds 110 percent of the Trigger Value for either (or both) of the corresponding 3-month periods ending in the 2 preceding calendar years. This "look-back" is computed by dividing the Trigger Value by the same measure for the corresponding 3 months in each of the applicable prior years, and the resulting decimal fraction is rounded to the hundredths place, multiplied by 100 and reported as an integer and compared to the statutory threshold to help determine the State's EB Program status; and

(iii) There is a State "off" indicator for high unemployment period for a week if either the requirements of paragraph (e)(2)(i) or (ii) of this section are not satisfied.

(3) *Method of computing the average rate of total unemployment.* The average rate of total unemployment is computed by dividing the average of 3 months of the level of seasonally adjusted unemployment in the State by the average of 3 months of the level of seasonally adjusted unemployment and employment in the State. The resulting rate is multiplied by 100 to convert it to a percentage basis and then rounded to the tenths place (the first digit to the right of the decimal place).

(4) *Method of computing the State "look-back."* The average rate of total unemployment, ending with a given month, is divided by the same measure for the corresponding 3 months in each of the applicable prior years. The resultant decimal fraction is then rounded to the hundredths place (the second digit to the right of the decimal place). The resulting number is then multiplied by 100 and reported as an integer (no decimal places) and compared to the statutory threshold to help determine the State's EB Program status.

(f) *Notice to Secretary.* Within 10 calendar days after the end of any week for which the head of a State agency has determined that there is an "on," or "off," or "no change" IUR indicator in the State, the head of the State agency must notify the Secretary of the determination. The notice must state clearly the State agency head's determination of the specific week for which there is a State "on" or "off" or "no change" indicator. The notice must include also the State agency head's findings supporting the determination, with a certification that the findings are made in accordance with the requirements of § 615.15. The Secretary may provide additional instructions for the contents of the notice to assure the correctness and verification of notices given under this paragraph. The Secretary will accept determinations and findings made in accordance with the provisions of this paragraph and of any instructions issued under this paragraph. A notice does not become final for purposes of EUCA and this part until the Secretary accepts the notice.

■ 10. Revise § 615.13 to read as follows:

§ 615.13 Announcement of the Beginning and Ending of Extended Benefit Periods or High Unemployment Periods.

(a) *State indicators*—(1) *Extended benefit period.* Upon receipt of a notice required by § 615.12(f) which the Department determines is acceptable, the Department will publish in the **Federal Register** a notice of the State agency head's determination that there is an "on" or an "off" indicator in the State, as the case may be, the name of the State and the beginning or ending of the extended benefit period, or high unemployment period, whichever is appropriate. If an "on" or "off" EB period is determined by the Department to be based on a State's TUR Trigger Value, the Department publishes that information in the **Federal Register** as well.

(2) *Notification.* The Department also notifies the heads of all other State agencies, and the Regional Administrators of the Employment and Training Administration of the State agency head's determination of the State "on" or "off" indicator for an extended benefit period, or high unemployment period (based on the insured unemployment rate in the State), or of the Department's determination of an "on" or "off" indicator (based on the total unemployment rate in a State) for an extended benefit period or high unemployment period and of the indicator's effect.

(b) *Publicity by State.* (1) Whenever a State agency head determines that there is an "on" indicator in the State by reason of which an extended benefit period (based on the insured unemployment rate in the State) will begin in the State, or an "off" indicator by reason of which an extended benefit period in the State (based on the insured unemployment rate) will end, the head of the State agency must promptly announce the determination through appropriate news media in the State after the Department accepts notice from the agency head in accordance the 615.12(f).

(2) Whenever the head of a State agency receives notification from the Department in accordance with § 615.12(f) that there is an "on" indicator by reason of which an extended benefit period or high unemployment period (based on the total unemployment rate in the State) will begin in the State, or an "off" indicator by reason of which a regular extended benefit period or high unemployment period (based on the total unemployment rate) will end, the head of the State agency must promptly announce the determination through the appropriate news media in the State.

(3) Announcements made in accordance with paragraphs (b)(1) or (b)(2) of this section must include the beginning or ending date of the extended benefit period or high unemployment period, whichever is appropriate. In the case of a regular EB period or high unemployment period that is about to begin, the announcement must describe clearly the unemployed individuals who may be eligible for extended compensation or high extended compensation during the period, and in the case of a regular EB period or high unemployment period that is about to end, the announcement must also describe clearly the individuals whose entitlement to extended compensation or high extended compensation will be terminated. If a high unemployment period is ending, but an extended benefit period will remain "on," the announcement must clearly state that fact and the effect on entitlement to extended compensation.

(c) *Notice to individuals.* (1) Whenever there has been a determination that a regular extended benefit period or high unemployment period will begin in a State, the State agency must provide prompt written notice of potential entitlement to Extended Benefits to each individual who has established a benefit year in the State that will not end before the beginning of the regular extended benefit period or high unemployment period, and who exhausted all rights under the State law to regular compensation before the beginning of the regular extended benefit period or high unemployment period.

(2) The State agency must provide the notice promptly to each individual who begins to claim sharable regular benefits or who exhausts all rights under the State law to regular compensation during a regular extended benefit period or high unemployment period, including exhaustion by reason of the expiration of the individual's benefit year.

(3) The notices required by paragraphs (c)(1) and (2) of this section must describe the actions required of claimants for sharable regular compensation and extended compensation and those disqualifications which apply to the benefits which are different from those applicable to other claimants for regular compensation which is not sharable.

(4) Whenever there is a determination that a regular extended benefit period or high unemployment period will end in a State, the State agency must provide prompt written notice to each individual who is currently filing claims for extended compensation of the forthcoming end of the regular extended benefit period or high unemployment period and its effect on the individual's right to extended compensation.

■ 11. Amend § 615.14 by revising paragraph (c)(4) to read as follows:

§ 615.14 Payments to States.

* * * * *

(c) * * *

(4) As provided in section 204(a)(2)(C) of EUCA, for any week in which extended compensation is not payable because of the payment of trade readjustment allowances, as provided in section 233(c) of the Trade Act of 1974, and § 615.7(d).

* * * * *

■ 12. Revise § 615.15 to read as follows:

§ 615.15 Records and reports.

(a) *General.* State agencies must furnish to the Secretary such information and reports and make such studies as the Secretary decides are necessary or appropriate for carrying out the purposes of this part.

(b) *Recordkeeping.* Each State agency must make and maintain records pertaining to the administration of the Extended Benefit Program as the Department requires, and must make all such records available for inspection, examination and audit by such Federal officials or employees as the Department may designate or as may be required by law.

Portia Wu

Assistant Secretary for Employment and Training.

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Parts 1, 11, 16, 106, 110, 111, 112, 114, 117, 120, 123, 129, 179, 211, and 507

[Docket Nos. FDA–2011–N–0920, FDA–2011–N–0921, FDA–2011–N–0922, FDA–2011–N–0143]

RIN 0910–AG10, 0910–AG35, 0910–AG36, 0910–AG64

The Food and Drug Administration Food Safety Modernization Act; Extension and Clarification of Compliance Dates for Certain Provisions of Four Implementing Rules

AGENCY: Food and Drug Administration, HHS.

ACTION: Final rule; extension and clarification of compliance dates for certain provisions.

SUMMARY: The Food and Drug Administration (FDA or we) is extending the dates for compliance with certain provisions in four final rules. We are extending the compliance dates to address concerns about the practicality of compliance with certain provisions, consider changes to the regulatory text, and better align compliance dates across the rules. In addition, we are clarifying certain compliance dates in the Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption rule.

DATES: This final rule is effective August 24, 2016. See sections III.C, IV.A.2, IV.B, and V through VIII for the extended compliance dates.

FOR FURTHER INFORMATION CONTACT:

For questions relating to Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Human Food: Jenny Scott, Center for Food Safety and Applied Nutrition (HFS–300), Food and Drug Administration, 5001 Campus Dr., College Park, MD 20740, 240–402–2166.

For questions relating to Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Food for Animals: Jeanette Murphy, Center for Veterinary Medicine (HFV–200), Food and Drug Administration, 7519 Standish Pl., Rockville, MD 20855, 240–402–6246.

For questions relating to Foreign Supplier Verification Programs for Importers of Food for Humans and Animals: Rebecca Buckner, Office of Food and Veterinary Medicine, Food and Drug Administration, 10903 New Hampshire Ave., Silver Spring, MD 20993–0002, 301–796–4576.

For questions relating to Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption: Samir Assar, Center for Food Safety and Applied Nutrition (HFS–317), Food and Drug Administration, 5001 Campus Dr., College Park, MD 20740, 240–402–1636.

SUPPLEMENTARY INFORMATION:

I. Background: The Four Related Rules Implementing the FDA Food Safety Modernization Act

This extension and clarification of compliance dates concerns four of the seven foundational rules that we have established in Title 21 of the Code of Federal Regulations (21 CFR) as part of our implementation of the FDA Food Safety Modernization Act (FSMA; Pub. L. 111–353). The four final rules are entitled "Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Human Food" (published in the **Federal Register** of September 17, 2015, 80 FR 55908) (*http://www.fda.gov/fsma*); "Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Food for Animals" (published in the **Federal Register** of September 17, 2015, 80 FR 51670) (*http://www.fda.gov/fsma*); "Foreign Supplier Verification Programs for Importers of Food for Humans and Animals" (published in the **Federal Register** of November 27, 2015, 80 FR 74226) (*http://www.fda.gov/fsma*); and "Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption" (published in the **Federal Register** of November 27, 2015, 80 FR 74354) (*http://www.fda.gov/fsma*).

In part 117 (21 CFR part 117), we have established our regulation entitled "Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Human Food" (80 FR 55908, September 17, 2015). Among other things, the rulemaking to establish part 117 amended our current good manufacturing practice (CGMP) regulation for manufacturing, packing, or holding human food to modernize it and establish it in new part 117, subparts A, B, and F. Part 117 also includes new requirements for domestic and foreign facilities that are required to register under section 415 of the Federal Food, Drug, and Cosmetic Act (the FD&C Act) (21 U.S.C. 350d) in subparts A, C, D, E, F, and G to establish and implement hazard analysis and risk-based preventive controls for human food (the human food preventive controls requirements). In the preamble of the final rule establishing part 117, we stated that the rule is effective November 16, 2015, and provided for compliance dates of 1 to 3 years from the date of publication in most cases (see table 53 in the preamble of the final rule establishing part 117, 80 FR 55908 at 56128). In the rulemaking to establish part 117, we also amended the "farm" definition in our regulations implementing section 415 of the FD&C Act (the section 415 registration regulation; 21 CFR part 1, subpart H) to clarify the scope of the exemption from registration requirements provided for "farms" and, in so doing, to clarify which human food establishments are subject to the human food preventive controls requirements, and which human food establishments are exempt from those requirements because they are "farms."

In part 507 (21 CFR part 507), we have established our regulation entitled "Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Food for Animals" (80 FR 56170, September 17, 2015). Among other things, the rulemaking to establish part 507 established new requirements for CGMPs in subparts A, B, and F (CGMP requirements) and also established requirements for hazard analysis and risk-based preventive controls for food for animals in subparts A, C, D, E, and F (the animal food preventive controls requirements). The part 507 requirements apply to domestic and foreign facilities that are required to register under the section 415 registration regulation and, thus, the "farm" definition that we amended as part of the rulemaking to establish part 117 also clarifies which animal food establishments are subject to the part 507 requirements, and which animal food establishments are exempt from those requirements because they are "farms." In the preamble of the final rule establishing part 507, we stated that the rule is effective November 16, 2015 (80 FR 56170). We provided for compliance dates of 1 to 3 years from the date of publication in most cases for compliance with the CGMP requirements, with an additional year beyond that for compliance with the animal food preventive controls requirements (see table 32 in the preamble of the final rule establishing part 507, 80 FR 56170 at 56329).

In part 1, subpart L (21 CFR part 1, subpart L), we have established our regulation entitled "Foreign Supplier Verification Programs for Importers of Food for Humans and Animals" (the FSVP regulation; 80 FR 74226, November 27, 2015). The FSVP regulation requires importers to establish foreign supplier verification programs to verify that their foreign suppliers are using processes and procedures that provide the same level of public health protection as those required under the provisions on hazard analysis and risk-based preventive controls and standards for produce safety in the FD&C Act, that the imported food is not adulterated, and that food is not misbranded with respect to food allergen labeling. In the preamble of the final rule establishing the FSVP regulation, we stated that the rule is effective January 26, 2016, and provided for varying compliance dates based in part on the size of the foreign supplier, the nature of the importer, and whether the foreign supplier is subject to certain other FSMA regulations (80 FR 74226 at 74332 to 74333, as corrected in a technical amendment (81 FR 25326, April 28, 2016)).

In part 112 (21 CFR part 112), we have established our regulation entitled "Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption" (the produce safety regulation; 80 FR 74354, November 27, 2015). Among other things, the rulemaking to establish the produce safety regulation set forth in a new part 112 procedures, processes, and practices that minimize the risk of serious adverse health consequences or death, including those reasonably necessary to prevent the introduction of known or reasonably foreseeable biological hazards into or onto produce and to provide reasonable assurances that the produce is not adulterated on account of such hazards. The produce safety regulation applies to certain produce farms, and does not apply to activities of facilities that are subject to part 117 (as established in part 117). In the preamble of the final rule establishing the produce safety regulation, we stated that the produce safety regulation is effective January 26, 2016, and provided for compliance dates of 1 to 6 years from the effective date depending on the commodity and the provision(s) (see table 30 in the preamble of the final rule establishing the produce safety regulation, 80 FR 74354 at 74527, as corrected in a technical amendment at 81 FR 26466, May 3, 2016). (Some of the compliance dates identified in the technical amendment fall on weekends (*i.e.*, January 26, 2019, is a Saturday and January 26, 2020, is a Sunday) and should therefore be read as referring to the next business day (*i.e.*, January 28, 2019, and January 27, 2020, respectively). We use the latter dates throughout this document.)

II. Summary of Compliance Date Extensions in This Rule

We are extending the dates for compliance with certain provisions in four final rules to address concerns about the practicality of compliance with certain provisions, consider changes to the regulatory text, and better align compliance dates across the rules. First, we are extending the compliance dates for certain related provisions concerning customer assurances when controls are applied downstream in the distribution chain in all four rules. Second, we are extending the compliance dates for part 117 and part 507 for facilities solely engaged in packing and/or holding activities conducted on raw agricultural commodities (RACs) that are produce and/or nut hulls and shells and for certain facilities that would qualify as secondary activities farms except for the ownership of the facility. Third, we are extending the compliance dates for part 117 for certain facilities that color RACs. Fourth, we are extending the compliance dates for part 507 for facilities solely engaged in the ginning of cotton. Fifth, we are extending the compliance dates for the FSVP regulation for importation of food contact substances. Sixth, we are extending the date for certain facilities producing Grade "A" milk and milk products covered by the National Conference on Interstate Milk Shipments (NCIMS) under the Pasteurized Milk Ordinance (PMO) to comply with the CGMP requirements of part 117.

Finally, we are clarifying how we interpret the compliance dates for certain provisions related to agricultural water testing in the produce safety regulation.

III. Extension of Compliance Dates for "Customer Provisions" in Part 117 and Related Rules

A. Background

In a supplemental notice of proposed rulemaking for part 117 (79 FR 58524, September 29, 2014), we proposed several exceptions to the requirement for a manufacturer/processor to establish and implement a supply-chain program. Under one proposed exception, a receiving facility would not have been required to have a supply-chain program if it relied on its customer to control the hazard and annually obtained from its customer written assurance that the customer had established and was following procedures (identified in the written assurance) that would significantly minimize or prevent the hazard (see the discussion in the preamble of the final rule at 80 FR 55908 at 56036; see the proposed regulatory text at 79 FR 58524 at 58565).

After considering comments, we replaced this proposed provision with several provisions (§§ 117.136(a)(2) through (4) and 117.137) (referred to collectively as "customer provisions") that apply when a manufacturer/processor identifies a hazard requiring a preventive control ("identified hazard"), does not control the identified hazard, and relies on an entity in its distribution chain to address the hazard (80 FR 55908 at 56037 to 56039). (In these provisions, "customer" means a commercial customer, not a consumer.) A manufacturer/processor that complies with the customer provisions is not required to implement a preventive control for the identified hazard. The combination of three requirements in the customer provisions is intended to provide assurance that the food will be processed to control the identified hazard before it reaches consumers:

- Documentation provided by the manufacturer/processor to its direct customer that the food is "not processed to control [identified hazard]" (the disclosure statement provisions; § 117.136(a)(2)(i), (3)(i), and (4)(i));
- Written assurance provided by the customer to the manufacturer/processor that the customer is manufacturing, processing, or preparing the food in accordance with applicable food safety requirements (the written assurance provisions; § 117.136(a)(2)(ii), (3)(ii), and (4)(ii)); and
- Provisions relating to accountability for written assurances (the accountability provision; § 117.137).

We established similar requirements in three other FSMA rules ("related rules"): Part 507 (§§ 507.36 (a)(2) through (4) and 507.37); the FSVP regulation (§§ 1.507(a)(2) through (4), and 1.507(c)); and the produce safety regulation (§ 112.2(b)(2) through (4), and (6)).

B. Written Assurances From Customers

On March 23, 2016, FDA met with the Grocery Manufacturers Association (GMA) at their request to listen to concerns regarding the customer provisions in the part 117 rule (Ref. 1). GMA provided examples of product distribution chains that would require vastly more written assurances and consequently resources to comply with the requirement than anticipated by FDA. For example, a manufacturing facility may sell such foods to a distributor, who may sell numerous items requiring assurances to multiple restaurants, cafeterias, delicatessens, and other distributors. GMA estimated that this could result in hundreds or even thousands of written assurances needed by a single distributor. A similar concern exists for the related rules.

After considering the information presented by GMA, FDA believes that the requirement for written assurance in the customer provisions of part 117 significantly exceeds the current practices of even the largest facilities; compliance by those facilities by September 19, 2016, may not be feasible; and it is appropriate to extend the compliance dates for 2 years for the written assurance requirements for part 117 and the related rules while FDA considers the best approach to address feasibility concerns.

We believe it continues to be appropriate to provide for an entity earlier in the distribution chain to disclose that a hazard has not been controlled and rely on a subsequent entity to control a hazard in human or animal food. For example, it would not make sense to require a facility that chops nuts to have a preventive control for *Salmonella* if the nuts are going to be used by customers in baked goods in accordance with a process validated to adequately control the hazard. In addition, it would not make sense to require a facility that manufactures a rendered meat ingredient for pet food to have a preventive control for *Salmonella* when the final pet food will go through an extrusion process at a customer's facility to control *Salmonella*. A manufacturer/processor under part 117 or part 507 that relies on a customer to control a hazard will continue to be required to comply with the disclosure statement provisions and disclose that the food has not been processed to control the hazard on the compliance date originally specified (we note that FDA will soon be making available for public comment draft guidance on the disclosure statement provisions). Subsequent entities in the distribution chain will continue to be subject to applicable requirements related to food adulteration in Federal and/or state and local laws and regulations, *e.g.*, part 117, part 507, and the Retail Food Code.

C. Extension of Compliance Dates

Table 1 provides a summary of the revised compliance dates.

TABLE 1—EXTENSION OF COMPLIANCE DATES FOR THE WRITTEN ASSURANCES IN THE CUSTOMER PROVISIONS IN PART 117 AND RELATED RULES

	Previously announced compliance date	Compliance date with extension
Human Food—§ 117.136(a)(2)(ii), (3)(ii), and (4)(ii)		
Small Business (a business (including any subsidiaries and affiliates) employing fewer than 500 full-time equivalent employees).	September 18, 2017	September 18, 2019.
Business that is neither small or very small (a business (including any subsidiaries and affiliates) averaging less than $1 million, adjusted for inflation, per year, during the 3-year period preceding the applicable calendar year in sales of human food plus the market value of human food manufactured, processed, packed or held without sale (*e.g.* held for a fee)).	September 19, 2016	September 19, 2018.
Animal Food—§ 507.36(a)(2)(ii), (3)(ii), and (4)(ii)		
Small Business (a business (including any subsidiaries and affiliates) employing fewer than 500 full-time equivalent employees).	September 17, 2018	September 17, 2020.
Business that is neither small or very small ((a business (including any subsidiaries and affiliates) averaging less than $2,500,000, adjusted for inflation, per year, during the 3-year period preceding the applicable calendar year in sales of animal food plus the market value of animal food manufactured, processed, packed or held without sale (*e.g.*, held for a fee or supplied to a farm without sale)).	September 18, 2017	September 18, 2019.
FSVP—§ 1.507(a)(2)(ii), (3)(ii), and (4)(ii))		
Latest date of:		
18 months after the publication of the final rule	May 30, 2017	May 28, 2019.
Importers of food from foreign supplier subject to preventive controls regulation for human food, the preventive controls or CGMP requirements in part 507, or the produce safety regulation:	6 months after supplier is required to comply with the relevant regulations.	30 months after previously announced compliance date for the relevant regulations.
Produce Safety—§ 112.2(b)(3)		
Very small businesses relying on the exemption in § 112.2(b) for sprouts that would otherwise be subject to subpart M (those with more than $25,000 but no more than $250,000 in average annual produce sales during the previous three year period).	January 28, 2019	January 26, 2021.
Small businesses relying on the exemption in § 112.2(b) for sprouts that would otherwise be subject to subpart M (those with more than $250,000 but no more than $500,000 in average annual produce sales during the previous three year period).	January 26, 2018	January 27, 2020.
All other businesses relying on the exemption in § 112.2(b) for sprouts that would otherwise be subject to subpart M.	January 26, 2017	January 28, 2019.

TABLE 1—EXTENSION OF COMPLIANCE DATES FOR THE WRITTEN ASSURANCES IN THE CUSTOMER PROVISIONS IN PART 117 AND RELATED RULES—Continued

	Previously announced compliance date	Compliance date with extension
Very small businesses relying on the exemption in § 112.2(b) for all other produce that would otherwise be covered (those with more than $25,000 but no more than $250,000 in average annual produce sales during the previous three year period).	January 27, 2020	January 26, 2022.
Small businesses relying on the exemption in § 112.2(b) for all other produce that would otherwise be covered (those with more than $250,000 but no more than $500,000 in average annual produce sales during the previous three year period).	January 28, 2019	January 26, 2021.
All other businesses relying on the exemption in § 112.2(b) for all other produce that would otherwise be covered.	January 26, 2018	January 27, 2020.

We are extending the compliance date by 2 years for the written assurance requirement in the customer provisions in part 117. With the extension, facilities that are small businesses must comply with § 117.136(a)(2)(ii), (3)(ii), and (4)(ii) by September 18, 2019, and other facilities subject to the requirements must comply with those provisions by September 19, 2018. As a result of the extension, the compliance date for certain associated requirements that are contingent on the specified delayed provisions are also delayed (*i.e.*, the recordkeeping requirements in §§ 117.136(b)(2) through (4) and 117.335 and the requirements in § 117.137 for a facility that provides a written assurance under § 117.136(a)(2), (3), or (4)). We are not extending the compliance date for qualified facilities (including very small businesses) as defined in § 117.3 because they are not subject to the requirements in § 117.136(a)(2)(ii), (3)(ii), and (4)(ii).

We are also extending the compliance date by 2 years for the written assurance requirement in the customer provisions in part 507. With the extension, facilities that are small businesses must comply with § 507.36(a)(2)(ii), (3)(ii), and (4)(ii) by September 17, 2020, and other facilities subject to the requirements must comply with those provisions by September 18, 2019. As a result of the extension, the compliance dates for certain associated requirements that are contingent on the specified delayed provisions are also delayed (*i.e.*, the recordkeeping requirements in §§ 507.36(b)(2) through (4) and 507.215 and the requirements in § 507.37 for a facility that provides a written assurance under § 507.36(a)(2), (3), or (4)). We are not extending the compliance date for qualified facilities (including very small businesses) as defined in § 507.3 because they are not subject to the requirements in § 507.36(a)(2)(ii), (3)(ii), and (4)(ii).

In addition, we are extending the compliance date under the FSVP regulation for complying with the written assurance requirements in § 1.507(a)(2)(ii), (3)(ii), and (4)(ii) by 2 years beyond the dates established in the final rule (as corrected in the technical amendment). In the preamble of the final rule, as corrected by the technical amendment, we stated that importers would need to comply with the FSVP regulation by the latest of the following:

- 18 months after the publication of the final rule;
- For importers of food from a foreign supplier that is subject to part 117, the CGMP requirements or the preventive controls requirements for animal food in part 507, or the produce safety regulation, 6 months after the supplier was required to comply with the relevant regulations; or
- For an importer subject to the supply-chain program provisions of the human or animal food preventive controls regulations, the date the importer, as a receiving facility, was required to comply with the supply-chain program provisions of the relevant regulation.

As a result of this extension, the earliest that an importer would be required to comply with the written assurance requirements in the customer provisions in § 1.507 would be May 28, 2019. When an importer's compliance date is determined by when the foreign supplier must comply with the preventive controls regulation for human food, the preventive controls or CGMP requirements in part 507, or the produce safety regulation (*i.e.*, when the importer must comply with FSVP 6 months after the foreign supplier is required to come into compliance), the importer's compliance date for the written assurance requirements in § 1.507 will be 2 years and 6 months after the previously-announced compliance dates for the relevant regulations. That is, the other changes we are making to compliance dates for the human and animal food preventive controls and produce safety regulations will not impact when an FSVP importer must comply with the written assurance requirements in the customer provisions in § 1.507. For example, although this rule extends the compliance dates for part 117 and part 507 for facilities solely engaged in packing and/or holding activities conducted on RACs that are produce that would qualify as secondary activities farms except for the ownership of the facility, an importer whose foreign supplier is such a facility will be required to comply with the assurance requirements in § 1.507 2 years and 6 months after the foreign supplier would have been required to comply with part 117 or part 507 under the final rules published on September 17, 2015 (80 FR 55908; 80 FR 56170). The importer's compliance date for the assurance requirements in § 1.507 is not 2 years and 6 months after the newly-established part 117 and part 507 compliance dates announced in this rule. As a result of the extension, the compliance dates for certain associated requirements that are contingent on the specified delayed provisions are also delayed (*i.e.*, the requirements in § 1.507(c) for a customer or subsequent entity that provides a written assurance under § 1.507(a)(2), (3), or (4)).

Finally, we are extending by 2 years the compliance dates for the written assurance requirements in the customer provisions of the produce safety regulation in § 112.2(b)(3). With the extension, sprout operations wishing to rely on the exemption in § 112.2(b) with respect to sprouts that would otherwise be subject to subpart M of part 112 must comply with the written assurances provisions in § 112.2(b)(3) by January 26, 2021 (very small businesses); January 27, 2020 (small businesses); and January 28, 2019 (all other businesses). With the extension, operations wishing to rely on the exemption in § 112.2(b) with respect to other types of produce that would otherwise be covered must comply with the written assurances provisions in § 112.2(b)(3) by January 26, 2022 (very small businesses); January 26, 2021 (small businesses), and January 27, 2020 (all other businesses). As a result of the extension, the compliance dates for certain associated requirements that are contingent on the specified delayed provisions are also delayed (*i.e.*, § 112.2(b)(4) and (6)).

IV. Extension of Certain Compliance Dates for Both Part 117 and Part 507

A. Facilities Solely Engaged in Packing and/or Holding Activities Conducted on Produce RACs and/or Nut Hulls and Shells

Some facilities that are subject to part 117 are solely engaged in packing and/or holding RACs that are produce ("produce RACs"). These activities are similar to packing and holding activities commonly conducted on produce RACs by farms subject to the produce safety regulation. Examples of such facilities are produce packinghouses, warehouses that hold produce RACs, and facilities that hull, shell, pack and/or hold nuts (nuts are produce RACs and hulling and shelling may be considered "packing" when done for safe or effective packing). (We note that FDA will soon be making available for public comment a draft guidance on classification of activities as harvesting, packing, holding, or manufacturing/processing for farms and facilities). During the rulemaking to establish part 117, we received comments asking us to revise the regulatory text to ensure that similar activities would be treated similarly under either the produce safety regulation or part 117. (See Comment 25, 80 FR 55908 at 55927 to 55928.)

We received comments that expressed concern about how the requirements in part 117 for environmental monitoring and product testing would apply to off-farm facilities that pack or hold produce RACs. (See Comment 524, 80 FR 55908 at 56062.) In responding to those comments, we stated that we were considering developing a separate guidance on packing and holding operations for produce RACs in light of the questions we have received regarding similarities and differences for off-farm packing and holding compared to on-farm packing and holding. In a letter to us dated April 19, 2016, the United Fresh Produce Association and 21 other organizations (UFPA et al.) noted that such guidance has not been issued, and the September 19, 2016, compliance date for part 117 is approaching (Ref. 2).

1. Similarities of Packing and Holding Activities Conducted on Produce RACs

In the preamble of the final rule establishing part 117, we described several changes to the regulatory text in response to comments asking us to consider revisions to ensure that similar activities would be treated the same way under either the produce safety regulation or part 117. (See Response 25, 80 FR 55908 at 55928 to 5929.) For example, we revised the "farm" definition to provide for two types of farms: (1) A primary production farm and (2) a secondary activities farm (see §§ 1.227 and 117.3). With the added definition of "secondary activities farm," some packinghouses that are managed by a business entity (such as a cooperative) that is different from the business entity growing crops (such as individual farms) can be within the "farm" definition and, thus, not be subject to the human food preventive controls requirements. We also established a new provision to allow off-farm establishments that package, pack, and hold produce RACs to comply with the CGMPs in part 117 by complying with the relevant requirements for packing and holding in the final produce safety regulation (see § 117.8).

In responding to these comments, we noted that the revised "farm" definition did not, as requested, provide for all off-farm operations such as certain packinghouses and hulling/shelling operations to be subject to the produce safety regulation rather than part 117. We explained that the statutory framework does not provide for entities such as packinghouses and hulling/shelling operations that do not have a sufficient connection to a farm to be subject to the requirements of the produce safety regulation. However, we stated that we continued to believe that an off-farm packinghouse that is subject to the human food preventive controls requirements in part 117 will be able to draw from the provisions of the produce safety regulation in developing its food safety plan and establishing preventive control management components that are appropriate in light of the nature of the preventive controls and their role in the facility's food safety system. For example, we stated our expectation that the food safety plan for an off-farm packinghouse would focus on a few key preventive controls, including some that would have counterparts in the produce safety regulation, such as maintaining and monitoring the temperature of water used during packing (which would have counterparts under § 112.48(c) in the produce safety regulation). We also expected that an off-farm packinghouse would establish sanitation controls to address the cleanliness of food-contact surfaces (including food-contact surfaces of utensils and equipment) and the prevention of cross-contamination from insanitary objects and from personnel to food, food-packaging material, and other food-contact surfaces. On-farm packinghouses would be subject to similar, but not identical, requirements (see, *e.g.*, §§ 112.111(b) and 112.123(d)(1) for cleanliness of food-contact surfaces, and §§ 112.113 and 112.132 for protection against contamination).

We agree that certain activities conducted on produce RACs are similar regardless of where they happen. Therefore, facilities for which the packing and/or holding of produce RACs is subject to the human food preventive controls requirements may nonetheless still be able to draw from the provisions of the produce safety regulation in developing their food safety plans and establishing preventive control management components that are appropriate in light of the nature of the preventive controls and their role in the facility's food safety system. We acknowledge that we have not yet issued guidance with specific recommendations for how packinghouses subject to the human food preventive controls requirements could comply with those requirements.

2. Extension of Compliance Dates for Facilities Solely Engaged in Packing and/or Holding Produce RACs and/or Nut Hulls and Shells

Table 2 provides a summary of the revised compliance dates.

TABLE 2—EXTENSION OF COMPLIANCE DATES FOR BOTH PART 117 AND PART 507 FOR FACILITIES SOLELY ENGAGED IN PACKING AND/OR HOLDING PRODUCE RACs AND/OR NUT HULLS AND SHELLS

	Previously announced compliance date	Compliance date with extension
Human Food—Facilities solely engaged in packing and/or holding activities on produce RACs (part 117)		
Very Small Businesses (a business (including any subsidiaries and affiliates) averaging less than $1 million, adjusted for inflation, per year, during the 3-year period preceding the applicable calendar year in sales of human food plus the market value of human food manufactured, processed, packed or held without sale (e.g. held for a fee)).	September 17, 2018	January 27, 2020.
Small Businesses (a business (including any subsidiaries and affiliates) employing fewer than 500 full-time equivalent employees).	September 18, 2017	January 28, 2019.
Other Businesses	September 19, 2016	January 26, 2018.
Animal Food—Facilities solely engaged in packing and/or holding activities on produce RACs and/or nut hulls and shells that are used as animal food (part 507)		
Very Small Businesses (a business (including any subsidiaries and affiliates) averaging less than $2,500,000, adjusted for inflation, per year, during the 3-year period preceding the applicable calendar year in sales of animal food plus the market value of animal food manufactured, processed, packed or held without sale (e.g., held for a fee or supplied to a farm without sale)).	September 17, 2018 (CGMPs) September 17, 2019 (preventive controls).	January 27, 2020 (CGMPs) January 26, 2021 (preventive controls).
Small Businesses (a business (including any subsidiaries and affiliates) employing fewer than 500 full-time equivalent employees).	September 18, 2017 (CGMPs) September 17, 2018 (preventive controls).	January 28, 2019 (CGMPs) January 27, 2020 (preventive controls).
Other Businesses	September 19, 2016 (CGMPs) September 18, 2017 (preventive controls).	January 26, 2018 (CGMPs). January 28, 2019 (preventive controls).

We published the final rule establishing part 117 more than 2 months before we published the final rule establishing the produce safety regulation and, thus, the compliance dates for the produce safety regulation had not yet been established. To provide facilities that are solely engaged in packing and/or holding activities on produce RACs the same time to understand the applicable provisions of the produce safety regulation as farms that conduct similar packing and holding activities, and to enable such facilities to develop a food safety plan that builds on the requirements of the produce safety regulation, where applicable, we are extending the date for facilities that are solely engaged in packing and/or holding activities on produce RACs to comply with part 117 by approximately 16 months to make the compliance dates the same as for businesses in the same size categories in the produce safety regulation. For example, the new compliance date for a facility that is a small business under part 117 is the compliance date for a small business under the produce safety regulation, regardless of whether the facility subject to part 117 would be considered a small business under the produce safety regulation. (Note that the produce safety regulation has different compliance dates associated with sprouts but for the purposes of this extension we are not establishing different dates for sprouts.) This will match the other extended compliance dates that relate to the "farm" definition or the produce safety regulation in this document.

With the extension, eligible facilities that are very small businesses must comply with part 117 by January 27, 2020; eligible facilities that are small businesses must comply by January 28, 2019, and all other eligible facilities must comply by January 26, 2018. We are extending compliance dates for very small businesses because, although they are not required to comply with subparts C and G (*e.g.*, they are not required to have food safety plans), one of their options for compliance includes identifying the potential hazards associated with the food being produced, implementing preventive controls to address the hazards, and monitoring the performance of the preventive controls to ensure that such controls are effective (21 CFR 117.201(a)(2)(i)).

To maintain the intended alignment between part 117 and part 507, we also are making a parallel extension to the dates for facilities that are solely engaged in packing and/or holding activities on produce RACs that are used as animal food to comply with part 507 requirements. While there may be limited facilities that pack and hold produce RACs exclusively for animal food, the by-products, such as culls, from packing and holding of produce RACs for human food are often used as animal food. The rulemaking to establish part 507 included a provision for certain human food by-products used as animal food (§ 507.12). To qualify for § 507.12, the human food facility whose packing or holding of produce results in by-products for use as animal food must be in compliance with the part 117 CGMPs or in compliance with the applicable requirements for packing and holding in part 112. The extension of compliance dates allows for facilities that are providing by-products for use as animal food time to implement the applicable part 117 or part 112 requirements. The parallel 16 month compliance date extension for part 507 is staggered to allow time for such operations to first comply with the part 507 CGMP requirements, including the related requirement in § 507.12. With the extension, eligible facilities that are very small businesses must comply with the CGMP requirements of part 507 by January 27, 2020, and with the preventive controls requirements of part 507 by January 26, 2021; eligible facilities that are small businesses must comply with the CGMP requirements of part 507 by January 28, 2019, and with the preventive controls requirements of part 507 by January 27, 2020, and all other eligible facilities must comply with the CGMP requirements of part 507 by January 26, 2018, and with the preventive controls requirements of part 507 by January 28, 2019.

In addition, nut hulls and shells are used for animal food and result from some activities performed by those facilities that are receiving an extension to comply with part 117. Therefore, we are extending the compliance dates for animal food preventive controls requirements for facilities solely engaged in packing and/or holding activities conducted on nut hulls and shells. Facilities that are solely engaged in hulling, shelling, drying, packing, and/or holding of nuts and hulls are exempt from the part 507 CGMP requirements (§ 507.5(h)(2)) and will continue to remain exempt. With the extension, eligible facilities that are very small businesses must comply with animal food preventive controls requirements by January 26, 2021; eligible facilities that are small businesses must comply by January 27, 2020, and all other eligible facilities must comply by January 28, 2019.

The extended compliance dates do not apply to facilities that manufacture/process produce RACs or nut hulls and shells in addition to packing and/or holding produce RACs or nut hulls and shells, because such facilities must come into compliance with part 117 and part 507 with respect to their manufacturing/processing as well as their packing and holding. Examples of facilities to which the extended compliance dates apply are packinghouses that solely pack and/or hold produce RACs; and facilities that solely hull, shell, pack, and/or hold nuts (nuts are produce RACs and hulling and shelling may be considered "packing" when done for safe or effective packing). Examples of manufacturing/processing facilities to which the extended compliance dates do not apply are a "fresh-cut" processing facility, such as a facility that produces bagged salad mixes or packages of sliced fruit, and a facility that grinds nut shells to make an animal food ingredient.

B. Certain Facilities That Would Qualify as Secondary Activities Farms Except for the Ownership of the Facility

Table 3 provides a summary of the revised compliance dates.

TABLE 3—EXTENSION OF COMPLIANCE DATES FOR CERTAIN FACILITIES THAT WOULD QUALIFY AS SECONDARY ACTIVITIES FARMS EXCEPT FOR OWNERSHIP OF THE FACILITY

	Previously announced compliance date	Compliance date with extension
Human Food—Facilities that would qualify as secondary activities farms except for ownership of the facility (part 117)		
Very Small Businesses (a business (including any subsidiaries and affiliates) averaging less than $1 million, adjusted for inflation, per year, during the 3-year period preceding the applicable calendar year in sales of human food plus the market value of human food manufactured, processed, packed or held without sale (*e.g.,* held for a fee)).	September 17, 2018	January 27, 2020.
Small Businesses (a business (including any subsidiaries and affiliates) employing fewer than 500 full-time equivalent employees).	September 18, 2017	January 28, 2019.
Other Businesses	September 19, 2016	January 26, 2018.
Animal Food—Facilities that would qualify as secondary activities farms except for ownership of the facility (part 507)		
Very Small Businesses (a business (including any subsidiaries and affiliates) averaging less than $2,500,000, adjusted for inflation, per year, during the 3-year period preceding the applicable calendar year in sales of animal food plus the market value of animal food manufactured, processed, packed or held without sale (*e.g.,* held for a fee or supplied to a farm without sale)).	September 17, 2018 (CGMPs) September 17, 2019 (preventive controls).	January 27, 2020 (CGMPs). January 26, 2021 (preventive controls).
Small Businesses (a business (including any subsidiaries and affiliates) employing fewer than 500 full-time equivalent employees).	September 18, 2017 (CGMPs) September 17, 2018 (preventive controls).	January 28, 2019 (CGMPs). January 27, 2020 (preventive controls).
Other Businesses	September 19, 2016 (CGMPs) September 18, 2017 (preventive controls).	January 26, 2018 (CGMPs). January 28, 2019 (preventive controls).

The rulemaking to establish part 117 created a "secondary activities farm" definition within the "farm" definition to cover certain operations that are not located on a primary production farm but are sufficiently related to a primary production farm so that it is appropriate to consider the operations to be farms (§ 1.227). A secondary activities farm is devoted to harvesting (such as hulling or shelling), packing, and/or holding of RACs (such as produce, grains, and eggs). Further, a majority interest in a secondary activities farm must be majority-owned (singly or jointly) by the primary production farm(s) that grows, harvests, and/or raises the majority of the RACs harvested packed, and/or held by the secondary activities farm (§ 1.227).

We have received questions via our Technical Assistance Network regarding whether certain operations qualify as secondary activities farms under part 117 and part 507. These questions describe a variety of business structures that may satisfy our intention to require a close relationship regarding ownership of the primary and secondary activities farms but the business structures do not meet the ownership requirement as codified in the "farm" definition. For example, some operations that might otherwise qualify as secondary activities farms own the primary production farm, rather than being owned by the primary production farm as currently required. Other operations that might otherwise qualify as a secondary activities farm are operations that are not owned by (and do not own) the primary production farm but are majority owned by the same entity as the primary production farm. For example, Farm A is a primary production farm. Facility B is a produce packinghouse that packs only produce from Farm A. Farm A and Facility B are both part of Corporation C. Despite the close relationship, Facility B is not a secondary activities farm under the current definition because Farm A does not own a majority interest in Facility B.

We are extending the compliance dates for certain operations that would be secondary activities farms except that they do not meet the ownership criterion in the definition. The extension is applicable only to an operation satisfying all of the following requirements: (1) The operation is not located on a primary production farm; (2) the operation is devoted to harvesting, packing, and/or holding of RACs (including operations that hull, shell, and/or dry nuts without additional manufacturing); and (3) the operation is under common ownership with the primary production farm(s) that grows, harvests, and/or raises the majority of the RACs harvested, packed, and/or held by the operation. Examples of common ownership include an operation that is owned by (or that owns) one or more primary production farms (*e.g.,* a packinghouse owned by a cooperative of individual farms) and an operation under common ownership with a primary production farm, such as operations that are managed within the same business structure as the primary production farm (*e.g.,* the farm and packinghouse are separate operations owned by parents and their children, respectively, and both operations are part of the same business jointly owned by the parents and children). Other limitations on secondary activities farms remain. For example, feed mills manufacturing animal food for contract farms would not qualify because, among other reasons, those feed mills are conducting manufacturing/processing outside the farm definition.

We are extending the compliance dates for part 117 for operations satisfying all of the requirements by approximately 16 months to match the compliance dates for businesses in the same size categories in the produce safety regulation (note that the produce safety regulation has different compliance dates associated with sprouts but for purposes of this extension we are not establishing different dates for sprouts). This will match the other extended compliance dates that relate to the "farm" definition or the produce safety regulation in this document. With the extension, eligible facilities that are very small businesses must comply with part 117 by January 27, 2020; eligible facilities that are small businesses must comply by January 28, 2019, and all other eligible facilities must comply by January 26, 2018.

The parallel 16 month compliance date extension for part 507 is staggered to allow time for operations satisfying all of the requirements to first comply with the CGMP requirements. With the extension, eligible facilities that are very small businesses must comply with the CGMP requirements of part 507 by January 27, 2020, and with the preventive controls requirements of part 507 by January 26, 2021; eligible facilities that are small businesses must comply with the CGMP requirements of part 507 by January 28, 2019, and with the preventive controls requirements of part 507 by January 27, 2020, and all other eligible facilities must comply by with the CGMP requirements of part 507 by January 26, 2018, and with the preventive controls requirements of part 507 by January 28, 2019.

V. Extension of Compliances Dates for Certain Facilities That Color RACs Under Part 117

Table 4 provides a summary of the revised compliance dates.

TABLE 4—EXTENSION OF COMPLIANCE DATES IN PART 117 FOR CERTAIN FACILITIES THAT COLOR RACs

	Previously announced compliance date	Compliance date with extension
Human Food—Facilities that color RACs under part 117		
Very Small Businesses (a business (including any subsidiaries and affiliates) averaging less than $1 million, adjusted for inflation, per year, during the 3-year period preceding the applicable calendar year in sales of human food plus the market value of human food manufactured, processed, packed or held without sale (*e.g.,* held for a fee)).	September 17, 2018	January 27, 2020.
Small Businesses (a business (including any subsidiaries and affiliates) employing fewer than 500 full-time equivalent employees).	September 18, 2017	January 28, 2019.
Other Businesses	September 19, 2016	January 26, 2018.

The definition of RAC in section 201(r) of the FD&C Act includes "fruits that are . . . colored . . . in their unpeeled natural form prior to marketing." (21 U.S.C. 321(r)). As we noted in the proposed rule to establish part 117 (78 FR 3646 at 3678 to 3679, January 16, 2013), FDA does not consider the activity of coloring a RAC to result in the transformation of the RAC into a processed food. However, this does not mean that coloring a RAC is not manufacturing/processing. The activity classification "manufacturing/processing" is broader than just activities that transform a RAC into a processed food. It includes most food-handling activities because it is satisfied by any degree of "making food from one or more ingredients, or synthesizing, preparing, treating, modifying or manipulating food" (§ 1.227). In contrast, transforming a RAC into a processed food generally requires meeting a threshold of altering the general state of the commodity. In the proposed rule, coloring was provided as an example of an activity that is manufacturing/processing but does not transform a RAC into a processed food (78 FR 3646 at 3678 to 3679).

An establishment that conducts manufacturing/processing activities other than those specified as being within the "farm" definition generally is a facility that is required to register and is subject to the human food preventive controls requirements in part 117. The "farm" definition provides for farms to do several manufacturing/processing activities, including treating RACs to manipulate ripening and packaging and labeling RACs. These are all manufacturing/processing activities that do not transform a RAC into a processed food. However, FDA did not include coloring, another manufacturing/processing activity that does not transform a RAC into a processed food, within the "farm" definition. Therefore, currently coloring triggers the registration requirement and application of the human food preventive controls requirements in part 117 (except where other exemptions apply). We are considering whether future rulemaking to modify the "farm" definition is appropriate to address the issue.

Therefore, we are extending the compliance dates for facilities that would qualify as farms if they did not color RACs. We are extending the compliance dates for such operations by approximately 16 months to match the compliance dates for businesses in the same size categories in the produce safety regulation. (Note that the produce safety regulation has different compliance dates associated with sprouts but for purposes of this extension, we are not establishing different dates for sprouts.) This will match the other extended compliance dates that relate to the "farm" definition or the produce safety regulation in this document. With the extension, eligible facilities that are very small businesses must comply with part 117 by January 27, 2020; eligible facilities that are small businesses must comply by January 28, 2019, and all other eligible facilities must comply by January 26, 2018. We are not extending the compliance dates for facilities that engage in additional manufacturing/processing activities currently outside of the "farm" definition because we expect such facilities to come into compliance with part 117 as a result of those other activities.

VI. Extension of Compliances Dates for Facilities Solely Engaged in the Ginning of Cotton Under Part 507

Table 5—provides a summary of the revised compliance dates.

TABLE 5—EXTENSION OF COMPLIANCE DATES FOR FACILITIES SOLELY ENGAGED IN THE GINNING OF COTTON UNDER PART 507

	Previously announced compliance date for part 507	Compliance date for part 507 with extension
Animal Food—Facilities solely engaged in the ginning of cotton under part 507		
Very Small Businesses (a business (including any subsidiaries and affiliates) averaging less than $2,500,000, adjusted for inflation, per year, during the 3-year period preceding the applicable calendar year in sales of animal food plus the market value of animal food manufactured, processed, packed or held without sale (*e.g.,* held for a fee or supplied to a farm without sale)).	September 17, 2019	January 26, 2021.
Small Businesses (a business (including any subsidiaries and affiliates) employing fewer than 500 full-time equivalent employees).	September 17, 2018	January 27, 2020.
Other Businesses	September 18, 2017	January 28, 2019.

Cotton ginning is considered part of harvesting and thus within the "farm" definition when done on a farm (and when done for safe or effective packing, it may also be considered a packing activity on a farm). When done off-farm, cotton ginning is either a packing activity (if done for safe or effective packing), or a manufacturing/processing activity, depending on the circumstances. Ginning cotton does not transform a RAC into a processed food but results in component RACs, some of which (*e.g.,* cotton seed, lint, gin trash) are used for animal food. Therefore, currently off-farm cotton ginning in the production of animal food generally triggers the food facility registration requirement and application of the animal food preventive controls requirements in part 507 (facilities solely engaged in the ginning of cotton remain exempt from the CGMP requirements in part 507). Since publication of the final rule establishing part 507, we have received communications from the cotton industry expressing concern that the part 507 rule does not apply to the vast majority of cotton ginners that are part of a farm, while it does apply to the minority of cotton ginners that do not meet the "farm" definition, despite the fact that both types of operations perform the same activities (Ref. 3). We are considering whether and how FDA should address these concerns.

Therefore, we are extending the compliance dates for animal food preventive controls requirements for facilities subject to part 507 that solely engage in the ginning of cotton. We are extending the compliance dates for such operations by approximately 16 months to match the other extension dates that relate to the "farm" definition. With the extension, eligible facilities that are very small businesses must comply with the animal food preventive controls requirements of part 507 by January 26, 2021; eligible facilities that are small businesses must comply with the animal food preventive controls requirements of part 507 by January 27, 2020, and all other eligible facilities must comply with the animal food preventive controls requirements of part 507 by January 28, 2019. We are not extending the compliance dates for facilities that engage in additional animal food manufacturing/processing activities of cotton currently outside of the "farm" definition (*e.g.,* crushing cotton seed to make cotton seed oil) because we expect such facilities to come into compliance with the animal food preventive controls requirements of part 507 as a result of those other activities.

In addition, some cotton ginners may be operations that would be secondary activities farms except that they do not meet the ownership criterion in the current "farm" definition. For further discussion of the compliance date extension for these types of operations see section IV.B. Certain Facilities That Would Qualify as Secondary Activities Farms Except for the Ownership of the Facility.

VII. Extension of Compliance Dates for Importation of Food Contact Substances Under the FSVP Regulation

Table 6 provides a summary of the revised compliance dates.

TABLE 6—EXTENSION OF COMPLIANCE DATES FOR IMPORTATION OF FOOD CONTACT SUBSTANCES UNDER THE FSVP REGULATION

	Previously announced earliest compliance date	Earliest compliance date with extension
Importation of Food Contact Substances under the FSVP Regulation ..	May 30, 2017	May 28, 2019.

In the preamble of the final rule establishing the FSVP regulation, we stated that the definition of "food" for purposes of FSVP (§ 1.500) includes food contact substances that are considered "food" in section 201(f) of the FD&C Act. A food contact substance is any substance that is intended for use as a component of materials used in manufacturing, packing, packaging, transporting, or holding food if such use of the substance is not intended to have any technical effect in such food (21 CFR 170.3(e)(3)). The term "food" is defined in section 201(f)(3) of the FD&C Act to include articles used as components of food. Therefore, we concluded that importers must have an FSVP for a food contact substance that they import that meets the definition of "food" in section 201(f) of the FD&C Act (80 FR 74226 at 74233).

Since we published the final rule establishing the FSVP regulation, our Technical Assistance Network has received inquiries regarding the applicability of the FSVP regulation to food contact substances. In addition, on June 16, 2016, FDA met with representatives of the food packaging manufacturing industry at their request to listen to concerns regarding the applicability of the FSVP regulation to the importation of food contact substances (Ref. 4). The industry representatives stated that the supply chain associated with imported substances used to manufacture food contact substances is highly complex and very different from other foods subject to the FSVP regulation. The industry representatives also asserted that the hazards associated with food contact substances are already adequately addressed through the food additive petition and food contact substance notification processes under section 409 of the FD&C Act (21 U.S.C. 348).

After considering the information presented by the industry representatives, FDA believes that compliance with the requirement to conduct verification activities under the FSVP regulation for food contact substances by May 30, 2017, might not be feasible. Accordingly, we are extending the compliance date for the importation of food contact substances by 2 years so that we can consider how best to address the feasibility concerns. We note the relatively rare occurrence of significant safety concerns associated with the manufacture of food contact substances and FDA's extensive premarket approval and review processes for these substances under section 409 of the FD&C Act provide some assurances regarding safety during this time. As a result of this extension, the earliest that an importer would be required to comply with FSVP for the importation of food contact substances would be May 28, 2019.

VIII. Extension of Compliance Date for the CGMP Requirements of Part 117 for Facilities Producing Grade "A" Milk and Milk Products Covered by NCIMS Under the PMO

In the preamble of the final rule establishing part 117, we established a compliance date of September 17, 2018, for "PMO facilities" (see Response 214, 80 FR 55908 at 55987 to 55988). As we discussed in Response 214, we agreed that we should make use of the existing system of State regulatory oversight for Grade "A" milk and milk products provided through the NCIMS and the food safety requirements of the PMO. We described our reasons for deciding to extend the compliance date for "PMO-regulated facilities" to comply with the human food preventive controls requirements to September 17, 2018. Those reasons related to the current provisions of the PMO, the work already begun by NCIMS to modify the PMO to include all of the human food preventive controls requirements established in part 117, and complex implementation issues concerning the interstate movement of milk and milk products and imported milk.

In the **Federal Register** of November 18, 2015 (80 FR 71934), we clarified that the extended compliance date of September 17, 2018, for "PMO facilities" applies only to Grade "A" milk and milk products covered by NCIMS under the PMO, and not to the manufacturing, processing, packing, or holding of other food produced in such facilities. In the November 18, 2015, clarification, we did not discuss the date for "PMO facilities" to be in compliance with the CGMP requirements of part 117. During our outreach activities for implementation of part 117 we have received questions about when "PMO facilities" must comply with the modernized CGMP requirements of part 117 (primarily located in subpart B).

We have not established compliance dates for the modernized CGMPs that are different from the general compliance dates for the preventive controls requirements in part 117 with one exception related to "PMO facilities" (see table 53 in the preamble of the final rule establishing part 117, 80 FR 55908 at 56128). Specifically, we provided that the extension of the compliance date for "PMO facilities" until September 17, 2018, applied only to "subparts C and G" (the principal provisions of the human preventive controls requirements) (see Response 214, 80 FR 55908 at 55987 to 55988). In this document, we are extending the date for compliance with the modernized CGMPs by "PMO facilities" until September 17, 2018. We will continue to work with the NCIMS to modify the PMO to reflect the modernized CGMPs and the preventive control requirements. The extension will create a single compliance date for the Grade "A" milk and milk products covered by the PMO. Note that this extension applies only to Grade "A" milk and milk products covered by NCIMS under the PMO, and not to the manufacturing, processing, packing, or holding of other food produced in such facilities.

IX. Clarification of Compliance Dates for Certain Agricultural Water Testing Provisions in Produce Safety Regulation

In this final rule, we are also clarifying our intent regarding the meaning of the compliance dates with respect to certain testing requirements related to agricultural water in the produce safety regulation.

Specifically, in the preamble of the final rule establishing the produce safety regulation (at 80 FR 74354 at 74453 to 74454) we explained that we excluded § 112.46(b)(1), with respect to untreated surface water only, from the 2-year extended compliance period provided for the remainder of § 112.46 because, in order to comply with the microbial quality criteria in § 112.44(b), farms must have developed a microbial water quality profile (MWQP) based on the initial survey conducted over a minimum of 2 years and not greater than 4 years. We stated that to develop the MWQP prior to the point at which they must comply with all of the requirements of subpart E, covered farms must begin water sampling and subsequent testing not later than 4 years after issuance of the rule for very small farms; not later than 3 years after issuance of the rule for small farms; and not later than 2 years after issuance of the rule for all other farms. As an example we stated that initiating water sampling upon publication of the rule would allow covered farms that are not small or very small to collect 5 samples per year over the next 4 years, sufficient to make up the minimum 20 samples necessary to develop the MWQP required under § 112.46(b) at the point at which they must comply with all of the requirements of subpart E. We also stated that if these covered farms initiated water sampling 2 years after issuance of the rule, the farms would need to collect 10 samples per year over the next 2 years to make up the minimum 20 samples necessary to develop the MWQP.

We want to clarify and correct these earlier statements. We note that § 112.46(b)(1)(i)(A) allows covered farms discretion as to both (1) the number of samples they include in their initial survey, provided that the total must be 20 or more samples; and (2) the time period over which such samples are taken, provided that the period must be at least 2 years and no more than 4 years. For each business size category, the compliance date for § 112.46(b)(1) with respect to untreated surface water testing is 2 years before the compliance date for the § 112.44(b) microbial quality criteria for such water. This does not mean that covered farms have only 2 years in which to conduct their initial surveys for untreated surface water under § 112.46(b)(1) if they begin testing on the compliance date for that provision. Covered farms have 2 to 4 years in which to fulfill that requirement, per § 112.46(b)(1)(i)(A). This means that, for example, a farm that is not small or very small must begin sampling and testing untreated surface water in accordance with § 112.46(b)(1)(i)(A), as applicable, no later than January 26, 2018. The relevant compliance date for the related microbial quality criteria is 2 years later, on January 27, 2020. However, the farm has discretion under § 112.46(b)(1)(i)(A) as to both (1) the number of samples they include in their initial survey, provided that the total must be 20 or more samples; and (2) the time period over which such samples are taken, provided that the period must be at least 2 years and no more than 4 years. Therefore, to provide a few examples, all of the following possible approaches are acceptable for farms that are not small or very small:

- Beginning in 2018, conducting an initial survey consisting of taking 10 samples per year over 2 years (10 in 2018 and 10 in 2019) for a total of 20 samples; calculating the MWQP for the first time upon completing the 20-sample data set (*e.g.,* at the end of 2019, early 2020); and applying any necessary corrective actions under § 112.45(b) as soon as practicable and no later than the following year (*e.g.,* in 2020–2021).
- Beginning in 2018, conducting an initial survey consisting of taking 5 samples per year over 4 years (5 in 2018, 5 in 2019, 5 in 2020, and 5 in 2021) for a total of 20 samples; calculating the MWQP for the first time upon completing the 20-sample data set (*e.g.,* at the end of 2021, early 2022); and applying any necessary corrective actions under § 112.45(b) as soon as practicable and no later than the following year (*e.g.,* in 2022–2023).
- Beginning in 2018, conducting an initial survey consisting of taking 10 samples per year over 4 years (10 in 2018, 10 in 2019, 10 in 2020, and 10 in 2021) for a total of 40 samples; calculating the MWQP for the first time upon completing the 40-sample data set (*e.g.,* at the end of 2021, early 2022); and applying any necessary corrective actions under § 112.45(b) as soon as practicable and no later than the following year (*e.g.,* in 2022–2023).

For small and very small farms, the same approaches are acceptable, and the relevant dates are 1 and 2 years later, respectively.

X. Economic Analysis of Impacts

In the final regulatory impact analysis (FRIA) for part 117, we concluded that extension of the compliance dates would be unlikely to significantly affect the cost estimates made (Ref. 5). In the FRIA for the produce safety regulation, we noted that extended compliance dates would result in a decrease in costs as smaller operations would have additional time to fully and correctly implement the rule's requirements (Ref. 6). We did not quantify the potential impact of extended compliance periods on the costs of part 507 or the FSVP regulation but expect the impacts would be similar to those of part 117 or the produce safety regulation.

We are extending the compliance dates by 2 years for the written assurances in the customer provisions in part 117 and part 507, the produce safety regulation, and the FSVP regulation. Although none of the FRIAs provided a separate cost analysis for the written assurance provisions, based on our general conclusions about the costs of extending compliance dates and because the affected businesses will not be incurring the costs associated with the written assurances during the compliance delay period, we believe that a 2-year delay in the compliance dates for the written assurances in the customer provisions for these rules is unlikely to significantly affect the costs of the rules.

We are extending the compliance dates in part 117 and part 507 for facilities that are solely engaged in packing and/or holding activities on produce RACs and/or nut hulls and shells. The new compliance dates for part 117 are the same as the compliance dates under the produce safety regulation for the same size categories: January 27, 2020 (very small businesses), January 28, 2019 (small businesses), and January 26, 2018 (other businesses). The new compliance dates for part 507 are staggered to allow for compliance with CGMP requirements first followed by the animal food preventive controls requirements 1 year later. The part 507 CGMP compliance dates for these facilities are the same as the compliance dates under the produce safety regulation for the same size categories: January 27, 2020 (very small businesses), January 28, 2019 (small businesses), and January 26, 2018 (other businesses). The part 507 animal food preventive controls requirements for the same size categories are: January 26, 2021 (very small businesses), January 27, 2020 (small businesses), and January 28, 2019 (other businesses). Although the FRIAs for part 117 and part 507 did not provide a separate compliance cost analysis for facilities solely engaged in packing and/or holding activities on produce RACs and/or nut hulls and shells, based on our general conclusions about the costs of extending compliance dates and because the affected businesses will not be incurring the costs associated with compliance during the delay period, we believe that the delay in the compliance dates for these facilities is unlikely to significantly affect the costs of the rules.

We are similarly extending the compliance dates in part 117 and part 507 for certain facilities that would qualify as secondary activities farms except for the ownership of the facility. Although the FRIAs for part 117 and part 507 did not provide a separate compliance cost analysis for these facilities, based on our general conclusions about the costs of extending compliance dates and because the affected businesses will not be incurring the costs associated with compliance during the delay period, we believe that the delay in the compliance dates for these facilities is unlikely to significantly affect the costs of the rules.

We are similarly extending the compliance dates in part 117 for certain facilities that color RACs. Although the FRIA for part 117 did not provide a separate compliance cost analysis for these facilities, based on our general conclusions about the costs of extending compliance dates and because the affected businesses will not be incurring the costs associated with compliance during the delay period, we believe that the delay in the compliance dates for these facilities is unlikely to significantly affect the costs of the rule.

We are similarly extending the compliance dates in part 507 for facilities that are solely engaged in the ginning of cotton. Although the FRIA for part 507 did not provide a separate compliance cost analysis for these facilities, based on our general conclusions about the costs of extending compliance dates and because the affected businesses will not be incurring the costs associated with compliance during the delay period, we believe that the delay in the compliance dates for these facilities is unlikely to significantly affect the cost of the rule.

We are extending the compliance date for the importation of food contact substances by 2 years, such that the earliest that an importer would be required to comply with the FSVP regulation for the importation of food contact substances would be May 28, 2019. Although the FRIA for the FSVP regulation did not provide a separate compliance cost analysis for importers of food contact substances, based on our general conclusions about the costs of extending compliance dates and because the affected businesses will not be incurring the costs associated with compliance during the delay period, we believe that the delay in the compliance dates for these facilities is unlikely to significantly affect the cost of the rule.

We are extending the compliance date for the CGMP Requirements of part 117 for facilities producing Grade "A" milk and milk products covered by NCIMS under the PMO. Although the FRIA for part 117 did not provide a separate compliance cost analysis for these facilities to comply with subpart B of part 117, based on our general conclusions about the costs of extending compliance dates and because the affected businesses will not be incurring the costs associated with compliance during the delay period, we believe that the delay in the compliance dates for these facilities is unlikely to significantly affect the costs of the rule.

We have examined the impacts of the final rule under Executive Order 12866, Executive Order 13563, the Regulatory Flexibility Act (5 U.S.C. 601–612), and the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4). Executive Orders 12866 and 13563 direct us to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity). Executive Order 13563 states the importance of quantifying costs and benefits, reducing costs and burdens, and harmonizing rules. We believe this final rule will not increase compliance costs and will serve an important purpose of providing us an opportunity to consider how to reduce burdens on the public and maintain or improve coordination among the four rules affected. We believe that this final rule is not a significant regulatory action as defined by Executive Order 12866.

The Regulatory Flexibility Act requires us to analyze regulatory options that would minimize any significant impact of a rule on small entities. Because this final rule only extends various compliance dates for certain provisions and/or certain entities with respect to the four rules discussed here, we have determined that the final rule will not have a significant economic impact on a substantial number of small entities.

The Unfunded Mandates Reform Act of 1995 (section 202(a)) requires us to prepare a written statement, which includes an assessment of anticipated costs and benefits, before proposing "any rule that includes any Federal mandate that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100,000,000 or more (adjusted annually for inflation) in any one year." The current threshold after adjustment for inflation is $146 million, using the most current (2015) Implicit Price Deflator for the Gross Domestic Product. This final rule would not result in an expenditure in any year that meets or exceeds this amount.

XI. Analysis of Environmental Impact

We have determined under 21 CFR 25.30(j) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

XII. Paperwork Reduction Act of 1995

This final rule contains no collection of information. Therefore, clearance by the Office of Management and Budget under the Paperwork Reduction Act of 1995 is not required.

XIII. Federalism

We have analyzed this final rule in accordance with the principles set forth in Executive Order 13132. FDA has determined that the rule does not contain policies that have substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. Accordingly, we conclude that the rule does not contain policies that have federalism implications as defined in the Executive order and, consequently, a federalism summary impact statement is not required.

XIV. Executive Order 13175

We have analyzed this rule in accordance with the principles set forth in Executive Order 13175. We have determined that the rule does not contain policies that have substantial direct effects on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. Accordingly, we conclude that the rule does not contain policies that have tribal implications as defined in the Executive order and, consequently, a tribal summary impact statement is not required.

XV. References

The following references are on display in the Division of Dockets Management, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852, and are available for viewing by interested persons between 9 a.m. and 4 p.m., Monday through Friday; they are also available electronically at *http://www.regulations.gov.*

1. Grocery Manufacturers Association, "21 CFR 117.136. Industry Impacts from Disclosure and Written Assurance Requirements," 2016.
2. Letter dated April 19, 2016, from United Fresh Produce Association and 21 other organizations to Michael Taylor and Stephen Ostroff of FDA.
3. Letter dated May 20, 2016, from Roger A. Isom of the California Cotton Ginners Association to Jeanette Murphy of FDA.

4. Letter dated May 3, 2016, from Society of Plastics Industry, Inc., and other organizations to Michael Taylor and Stephen Ostroff of FDA.
5. FDA, "Part 117. FSMA Final Rulemaking for Current Good Manufacturing Practice and Hazard Analysis and Risk-Based Preventive Controls for Human Food: Final Regulatory Impact Analysis, Final Regulatory Flexibility Analysis, Final Unfunded Mandates Reform Act Analysis, and Final Paperwork Reduction Act Analysis," 2015. (*http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Reports/EconomicAnalyses/UCM472884.pdf*).
6. FDA, "Final Regulatory Impact Analysis, Final Regulatory Flexibility Analysis, and Unfunded Mandates Reform Act Analysis for the Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption," 2015. (*http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Reports/EconomicAnalyses/UCM472330.pdf*).

Dated: August 18, 2016.

Jeremy Sharp,

Deputy Commissioner for Policy, Planning, Legislation, and Analysis.

[FR Doc. 2016–20176 Filed 8–23–16; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 558

[Docket No. FDA–2016–N–1896]

New Animal Drugs for Use in Animal Feed; Category Definitions

AGENCY: Food and Drug Administration, HHS.

ACTION: Direct final rule.

SUMMARY: The Food and Drug Administration (FDA, the Agency, we) is amending the animal drug regulations by revising the definitions of the two categories of new animal drugs used in medicated feeds to base category assignment only on approved uses in major animal species. This revision will preserve the availability of medicated feeds intended for therapeutic use in minor animal species and prevent a significant disincentive for future development of additional minor species therapies.

DATES: This rule is effective December 1, 2016. Submit either electronic or written comments by November 7, 2016. See Section IV for further discussion of the effective date.

ADDRESSES: You may submit comments as follows:

Electronic Submissions

Submit electronic comments in the following way:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments. Comments submitted electronically, including attachments, to *http://www.regulations.gov* will be posted to the docket unchanged. Because your comment will be made public, you are solely responsible for ensuring that your comment does not include any confidential information that you or a third party may not wish to be posted, such as medical information, your or anyone else's Social Security number, or confidential business information, such as a manufacturing process. Please note that if you include your name, contact information, or other information that identifies you in the body of your comments, that information will be posted on *http://www.regulations.gov.*
- If you want to submit a comment with confidential information that you do not wish to be made available to the public, submit the comment as a written/paper submission and in the manner detailed (see "Written/Paper Submissions" and "Instructions").

Written/Paper Submissions

Submit written/paper submissions as follows:

- *Mail/Hand delivery/Courier (for written/paper submissions):* Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.
- For written/paper comments submitted to the Division of Dockets Management, FDA will post your comment, as well as any attachments, except for information submitted, marked and identified, as confidential, if submitted as detailed in "Instructions."

Instructions: All submissions received must include the Docket No. FDA–2016–N–1896 for "Category Definitions For Minor Species." Received comments will be placed in the docket and, except for those submitted as "Confidential Submissions," publicly viewable at *http://www.regulations.gov* or at the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

- *Confidential Submissions*—To submit a comment with confidential information that you do not wish to be made publicly available, submit your comments only as a written/paper submission. You should submit two copies total. One copy will include the information you claim to be confidential with a heading or cover note that states "THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION." The Agency will review this copy, including the claimed confidential information, in its consideration of comments. The second copy, which will have the claimed confidential information redacted/blacked out, will be available for public viewing and posted on *http://www.regulations.gov.* Submit both copies to the Division of Dockets Management. If you do not wish your name and contact information to be made publicly available, you can provide this information on the cover sheet and not in the body of your comments and you must identify this information as "confidential." Any information marked as "confidential" will not be disclosed except in accordance with 21 CFR 10.20 and other applicable disclosure law. For more information about FDA's posting of comments to public dockets, see 80 FR 56469, September 18, 2015, or access the information at: *http://www.fda.gov/regulatoryinformation/dockets/default.htm.*

Docket: For access to the docket to read background documents or the electronic and written/paper comments received, go to *http://www.regulations.gov* and insert the docket number found in brackets in the heading of this document, into the "Search" box and follow the prompts and/or go to the Division of Dockets Management, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: David Edwards, Center for Veterinary Medicine (HFV–220), Food and Drug Administration, 7519 Standish Pl., Rockville, MD 20855, 240–402–6205, *david.edwards@fda.hhs.gov.*

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I. Executive Summary

A. Purpose of the Direct Final Rule

FDA is issuing this direct final rule to revise the definitions of the two categories of new animal drugs used in medicated feeds to base category assignment only on approved uses in major animal species. This action is being taken to address a potential consequence of animal drug sponsor cooperation in implementing a strategy initiated by the FDA Center for Veterinary Medicine (CVM) to address antimicrobial resistance by taking measures to ensure the judicious use of antimicrobial drugs in animal agriculture. Under this program, sponsors of antimicrobial new animal drugs that also have importance in human medicine were requested to voluntarily withdraw approval of production (*e.g.*, growth production, feed efficiency) indications for their drug products that are intended for use in the feed or water of food-producing animals. Based on the existing drug category definitions, the voluntary withdrawal of production indications by these drug sponsors would, in some cases, result in a change to a medicated feed drug's category, potentially leading to additional consequences not foreseen at the time the program was initiated.

The category in which a new animal drug used in medicated feeds is placed is based on their likelihood of producing unsafe residues in the edible products of treated animals. Category I consists of those drugs that require no withdrawal period at the lowest use level in each species for which they are approved. Category II consists of those drugs that require a withdrawal period at the lowest use level for at least one species for which they are approved, or that are regulated on a "no-residue" basis or with a zero tolerance because of a carcinogenic concern, regardless of whether a withdrawal period is required.

New animal drugs approved for use in medicated feeds are approved as Type A medicated articles, the most concentrated form of the drug product for use by feed mills. Category I Type A medicated articles can be handled by both licensed and unlicensed feed mills, whereas Category II Type A medicated articles can be handled only by licensed feed mills.

Certain Category I Type A medicated articles would be recategorized to Category II when a production indication is voluntarily withdrawn by a sponsor as part of the judicious use initiative that is currently underway, based on the next lowest use level that remains once the production use is withdrawn having a withdrawal period such that the drug would then meet the definition for Category II. For Category I Type A medicated articles that include indications for minor species, FDA is concerned that if such a Type A medicated article is recategorized to Category II based on a withdrawal period for an approved therapeutic use in a minor species, sponsors may opt to request withdrawal of approval of these minor species indications in order to ensure the Type A medicated article can remain in Category I. Sponsors may also decline to pursue development of additional therapies for minor species if these uses would require a withdrawal period that would trigger a recategorization to Category II.

This direct final rule revises the category definitions such that they will be based only on whether a withdrawal period is required for a major species.[1] Under this new definition, a Category I Type A medicated article will not be recategorized to Category II based on the existence of a withdrawal period for an approved indication in a minor species, even if that minor species indication is the next lowest approved use level that remains after the production indication has been withdrawn. However, if the next lowest use level (apart from the minor species indication) is an indication approved for use in a major species that has a withdrawal period, under the new definition the drug will move to Category II.

The purpose of this revision is to preserve the present availability of medicated feeds intended for therapeutic uses in minor species and to prevent a significant disincentive for future development of additional therapies for minor species. We believe this revision will not compromise public health due to the comparatively lower exposure by humans to potential drug residues in edible tissues of food-producing minor species inherent in their less frequent consumption.

B. Summary of the Major Provisions of the Direct Final Rule

FDA is amending 21 CFR 558.3 *Definitions and general considerations applicable to this part* (§ 558.3) to base the definition for each of the two categories (Category I and Category II) of new animal drugs used in medicated feeds only on approved uses in major species. Definitions for "major species" and "minor species" are also being added to this section.

C. Legal Authority

FDA is issuing these regulations based on its authority under the new animal drug provisions in sections 512 of the Federal Food, Drug, and Cosmetic Act (the FD&C Act) (21 U.S.C. 360b) and under section 701(a) of the FD&C Act (21 U.S.C. 371(a)), which gives the Agency general rulemaking authority to issue regulations for the efficient enforcement of the FD&C Act.

D. Costs and Benefits

The revisions made by this direct final rule are intended to preserve the availability of medicated feeds intended for therapeutic use in minor animal species. In addition, these revisions will prevent a significant disincentive for future development of additional therapies for minor species. No additional costs or benefits will accrue from this rulemaking.

II. Background

FDA is issuing this direct final rule to revise the definitions of the two categories of new animal drugs used in medicated feeds to base category assignment only on approved uses in major animal species. To strengthen the Agency's medicated feed program, FDA issued a final rule in the **Federal Register** of March 3, 1986 (51 FR 7382), which, among other things, established two categories of new animal drugs used in medicated feeds. As discussed in the final rule, the Agency placed these drugs into categories based on their likelihood of producing unsafe residues in the edible products of treated animals (51 FR 7382). Category I consists of those drugs that require no withdrawal period at the lowest use level in each species for which they are approved. Category II consists of those drugs that require a withdrawal period at the lowest use level for at least one species for which they are approved, or that are regulated on a "no-residue" basis or with a zero tolerance because of a carcinogenic concern, regardless of whether a withdrawal period is required.

New animal drugs approved for use in medicated feeds are approved as Type A medicated articles, the most concentrated form of the drug product for use by feed mills. Category I Type A medicated articles can be handled by both licensed and unlicensed feed mills, whereas Category II Type A medicated articles can be handled only by licensed feed mills.

This action is being taken to address a potential consequence of animal drug sponsor cooperation in implementing a strategy initiated by CVM to address antimicrobial resistance by taking measures to ensure the judicious use of antimicrobials of importance to human medicine (*i.e.,* medically important antimicrobials) in animal agriculture. Specifically, CVM's initiative to ensure the judicious use of medically important antimicrobial drugs in animal agriculture advocates two specific changes to the approved conditions of use of medically important antimicrobials that are administered through the medicated feed or water of food-producing animals.

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[1] As a practical matter, categorization under the revised definitions in this direct final rule will be driven by approved indications for major food-producing species (cattle, poultry, swine, and turkeys). While the definition for major species includes horses, dogs, and cats, they are not regulated as food-producing major species and thus drugs approved for use in these species do not require an assessment of human food safety that may result in assignment of a withdrawal period. Minor species are defined as animals, other than humans, that are not major species. Minor species include animals such as sheep, goats, ducks, geese, and aquaculture species such as catfish, salmon, and trout.

These changes, which are described in Guidance for Industry (GFI) #213, "New Animal Drugs and New Animal Drug Combination Products Administered in or on Medicated Feed or Drinking Water of Food-Producing Animals: Recommendations for Drug Sponsors for Voluntarily Aligning Product Use Conditions with GFI #209," published December 2013 (*http://www.fda.gov/downloads/AnimalVeterinary/GuidanceComplianceEnforcement/GuidanceforIndustry/UCM299624.pdf*), are intended to reduce the development of antimicrobial resistance and thereby preserve the effectiveness of these important drugs for use in treating infections in humans. Following publication of GFI #213, all sponsors of these medically important antimicrobial new animal drug products approved for use in the feed or water of food-producing animals notified FDA in writing of their intent to voluntarily make changes to their affected products as outlined in the guidance.

Under GFI #213, sponsors of medically important antimicrobial new animal drugs approved for over-the-counter use in the feed or water of food-producing animals were asked to change the marketing status of their products to veterinary prescription (Rx) marketing status in the case of new animal drugs administered in water, or to veterinary feed directive (VFD) marketing status for drugs administered in or on animal feed. New animal drugs with Rx or VFD marketing status can legally only be used with a veterinarian's oversight. Prescription animal drugs require a veterinarian's prescription, while use of VFD drugs requires a VFD; both types of orders must be issued by a licensed veterinarian in the course of the veterinarian's professional practice.

In addition, under GFI #213 sponsors of medically important new animal drugs used in animal feed or water that have production indications were requested to voluntarily withdraw these indications; approved therapeutic indications for use of these drugs would remain.

In some instances, once a sponsor withdraws the production indication from a drug approved for use in animal feed (which is generally the lowest use level of the drug), the remaining lowest therapeutic use level will require a withdrawal period. Based on the existing definitions of the feed drug categories, this results in a Category I new animal drug being recategorized as a Category II drug, the more restrictive of the two possible categories of drugs used in medicated feed. Category II drugs require that the manufacture of Type B and Type C medicated feeds from Type A medicated articles be done in facilities possessing a medicated feed mill license, which number roughly 900 in the United States. In contrast, there are tens of thousands of unlicensed feed mills in this country. Such a recategorization to Category II, thereby limiting the use of the Type A medicated article to a much smaller subset of feed mills, may disrupt the existing movement of these medicated feeds through distribution channels.

FDA believes that sponsors may request voluntary withdrawal of those specific therapeutic indications as a way to keep their products in the less restrictive Category I when the recategorization of a drug to Category II is triggered by a therapeutic indication for a minor species. For certain drug products, the only therapeutic indications requiring a withdrawal period that would remain following the voluntary withdrawal of approval of production uses are those for minor species. The loss of therapeutic indications for minor species would adversely affect the availability of therapeutic medicated feeds necessary for the health of minor species, which is a matter of significant concern for the Agency.

This foreseeable adverse effect on the health of minor species would directly undermine the intent of Congress in passing the Minor Use and Minor Species Animal Health Act of 2004 (Pub. L. 108–282) as well as to our intent in establishing the implementing regulations under that statute. The Category I drugs likely to be affected have been safely used in this category for decades, and we have no reason to believe they would not continue to be safely used in this category moving forward.

Under the current category definitions in § 558.3 for feed use drugs, a drug will be included in Category II if the lowest use level of the drug in any approved species requires a withdrawal period. This approach equates the existence of a withdrawal period for a particular use with the potential risk that edible tissues from animals administered a medicated feed might contain a residue of concern.

However, the toxicological analysis of animal drugs used to calculate a withdrawal period is based on lifetime exposure by humans to potential drug residues. This assessment of lifetime exposure does not consider the lower risk to the public health from the use of these same new animal drugs in food-producing minor species attributable to the lower human consumption over time of edible tissues from food-producing minor species (Refs. 1 and 2). For this reason, FDA does not at this time believe this revision of the category definitions presents a risk to the public health.

In a manner similar to its effect on drug indications that are already approved, CVM believes the existing categorization scheme would pose a significant disincentive for future development of additional minor species therapies for existing Category I drugs if those new uses would require a withdrawal period and thus trigger a change to Category II for that drug.

Given the potential for implementation of GFI #213 to result in the foreseeable consequence of the withdrawal of approval of needed therapeutic indications for minor species, the definitions of the two categories of new animal drugs used in medicated feeds in § 558.3 are being revised to base category assignment only on uses in major species. This revision is expected to preserve the availability of drugs intended for therapeutic use in minor species and also prevent a significant disincentive for future development of additional therapies for minor species without compromising public health.

III. Provisions of the Regulation

We are amending paragraphs (b)(1)(i) and (ii) of this Agency's regulations at § 558.3 (*Definitions and general considerations applicable to this part.*) to base the definition for each of the two categories of new animal drugs (Category I and Category II) used in medicated feeds only on approved uses in major species. Section 558.3(b) is further amended to add definitions for "major species" and "minor species" that are identical to the definitions of those terms found in FDA's regulations for new animal drugs for minor use and minor species (21 CFR 516.3). We are revising the feed drug category definitions in § 558.3 to preserve the availability of medicated feeds intended for use in minor species and prevent a likely disincentive for development of additional therapies for minor species.

IV. Direct Final Rulemaking

FDA has determined that the subject of this rulemaking is suitable for a direct final rule. FDA is amending § 558.3(b)(1) by revising the definitions of Category I and Category II new animal drugs administered in or on medicated feed. This rule is intended to make noncontroversial changes to existing regulations. The Agency does not anticipate receiving any significant adverse comments on this rule.

Consistent with FDA's procedures on direct final rulemaking, we are publishing elsewhere in this issue of the **Federal Register** a companion proposed rule. The companion proposed rule and this direct final rule are substantively identical. The companion proposed rule provides the procedural framework within which the rule may be finalized in the event the direct final rule is withdrawn because of any significant adverse comment. The comment period for this direct final rule runs concurrently with the comment period of the companion proposed rule. Any comments received in response to the companion proposed rule will also be considered as comments regarding this direct final rule.

FDA is providing a comment period for the direct final rule of 75 days after the date of publication in the **Federal Register**. If FDA receives a significant adverse comment, we intend to withdraw this direct final rule before its effective date by publication of a notice in the **Federal Register** within 30 days after the comment period ends. A significant adverse comment is one that explains why the rule would be inappropriate, including challenges to the rule's underlying premise or approach, or would be ineffective or unacceptable without a change. In determining whether an adverse comment is significant and warrants withdrawing a direct final rule, the Agency will consider whether the comment raises an issue serious enough to warrant a substantive response in a notice-and-comment process in accordance with section 553 of the Administrative Procedure Act (APA) (5 U.S.C. 553).

Comments that are frivolous, insubstantial, or outside the scope of this direct final rule will not be considered significant or adverse under this procedure. For example, a comment recommending a regulation change in addition to those in the rule would not be considered a significant adverse comment unless the comment states why the rule would be ineffective without the additional change. In addition, if a significant adverse comment applies to an amendment, paragraph, or section of this rule and that provision can be severed from the remainder of the rule, FDA may adopt as final those provisions of the rule that are not the subject of a significant adverse comment.

If FDA withdraws the direct final rule, all comments received will be considered under the companion proposed rule in developing a final rule under the usual notice-and-comment procedures under the APA (5 U.S.C. 552 *et seq.*). If FDA does not receive a significant adverse comment in response to the direct final rule, the Agency will publish, within 30 days after the comment period ends, a document in the **Federal Register** confirming the effective date of the final rule. The Agency intends to make the direct final rule effective December 1, 2016.

A full description of FDA's policy on direct final rule procedures may be found in a guidance document announced in the **Federal Register** of November 21, 1997 (62 FR 62466). The guidance document may be accessed at: *http://www.fda.gov/RegulatoryInformation/Guidances/ucm125166.htm.*

V. Legal Authority

We are issuing these regulations under the legal authority provided by section 512 of the FD&C Act relating to new animal drugs and section 701(a) of the FD&C Act. Section 512 gives FDA the authority to approve new animal drug applications (NADAs). Such approval establishes conditions of use under which the drug can be used in a safe and effective manner. Categorization of new animal drugs used in medicated feeds is one such condition of use. In addition, section 701(a) of the FD&C Act gives FDA general rulemaking authority to issue regulations for the efficient enforcement of the FD&C Act.

VI. Economic Analysis of Impacts

We have examined the impacts of the direct final rule under Executive Order 12866, Executive Order 13563, the Regulatory Flexibility Act (5 U.S.C. 601–612), and the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4). Executive Orders 12866 and 13563 direct us to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity). We believe that this direct final rule is not a significant regulatory action as defined by Executive Order 12866.

The Regulatory Flexibility Act requires Agencies to analyze regulatory options that would minimize any significant impact of a rule on small entities. Because this direct final rule would not impose any compliance costs on the sponsors of animal drug products that are currently marketed or in development, we certify that this direct final rule will not have a significant economic impact on a substantial number of small entities.

The Unfunded Mandates Reform Act of 1995 (section 202(a)) requires us to prepare a written statement, which includes an assessment of anticipated costs and benefits, before issuing "any rule that includes any Federal mandate that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100,000,000 or more (adjusted annually for inflation) in any one year." The current threshold after adjustment for inflation is $146 million, using the most current (2015) Implicit Price Deflator for the Gross Domestic Product. This direct final rule would not result in an expenditure in any year that meets or exceeds this amount.

This direct final rule allows certain new animal drugs approved for use in animal feed that would otherwise be recategorized as Category II drugs under the current definitions in § 558.3 following withdrawal of approval of production indications during GFI #213 implementation to remain in Category I if the change to Category II would have been triggered by a minor species indication.

Based on the revised definitions of the two feed drug categories, there is one drug, sulfamerazine for control of furunculosis in trout (21 CFR 558.582), that will be recategorized from Category II to Category I as a result of this direct final rule. No compliance costs will be incurred due to this recategorization because no changes to the approved application are required for continued marketing of the drug.

VII. Analysis of Environmental Impact

We have determined under 21 CFR 25.30(h) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

VIII. Paperwork Reduction Act of 1995

This direct final rule contains no collection of information. Therefore, clearance by the Office of Management and Budget under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520) is not required.

IX. Federalism

We have analyzed this direct final rule in accordance with the principles set forth in Executive Order 13132. We have determined that this direct final rule does not contain policies that have substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. Accordingly, we have concluded that this direct final rule does not contain policies that have federalism implications as defined in the Executive Order and, consequently, a federalism summary impact statement is not required.

X. References

The following references are on display in the Division of Dockets Management (see **ADDRESSES**) and are available for viewing by interested persons between 9 a.m. and 4 p.m., Monday through Friday; they are also available electronically at *http://www.regulations.gov.* FDA has verified the Web site addresses, as of the date this document publishes in the **Federal Register**, but Web sites are subject to change over time.

1. U.S. Department of Agriculture, "Livestock & Meat Domestic Data," *http://www.ers.usda.gov/data-products/livestock-meat-domestic-data* (accessed on June 23, 2016).
2. "Food Fish Production and Sales by Species, by Size Category, by State and United States: 2005," *http://www.agcensus.usda.gov/Publications/2002/Aquaculture/aquacen2005_08.pdf* (accessed on June 23, 2016).

List of Subjects in 21 CFR Part 558

Animal drugs, animal feeds.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs and redelegated to the Center for Veterinary Medicine, 21 CFR part 558 is amended as follows:

PART 558—NEW ANIMAL DRUGS FOR USE IN ANIMAL FEEDS

■ 1. The authority citation for part 558 continues to read as follows:

Authority: 21 U.S.C. 354, 360b, 360ccc, 360ccc–1, 371.

■ 2. In § 558.3, revise paragraphs (b)(1)(i) and (ii); and add paragraphs (b)(13) and (14) to read as follows:

§ 558.3 Definitions and general considerations applicable to this part.

* * * * *

(b) * * *

(1) * * *

(i) Category I—These drugs require no withdrawal period at the lowest use level in each major species for which they are approved or are approved for use only in minor species.

(ii) Category II—These drugs require a withdrawal period at the lowest use level for at least one major species for which they are approved, or are regulated on a "no-residue" basis or with a zero tolerance because of carcinogenic concern regardless of whether a withdrawal period is required in any species.

* * * * *

(13) "Major species" means cattle, horses, swine, chickens, turkeys, dogs, and cats.

(14) "Minor species" means animals, other than humans, that are not major species.

Dated: August 18, 2016.

Jeremy Sharp,

Deputy Commissioner for Policy, Planning, Legislation, and Analysis.

[FR Doc. 2016–20148 Filed 8–23–16; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 117

[Docket No. USCG–2016–0814]

Drawbridge Operation Regulation; Trent River, New Bern, NC

AGENCY: Coast Guard, DHS.

ACTION: Notice of deviation from drawbridge regulation.

SUMMARY: The Coast Guard has issued a temporary deviation from the operating schedule that governs the U.S. 70/Alfred A. Cunningham Bridge across the Trent River, mile 0.0, at New Bern, NC. The deviation is necessary to facilitate safe participation in the Multiple Sclerosis Society's Historic New Bern Bike Ride. This deviation allows the bridge to remain in the closed-to-navigation position.

DATES: The deviation is effective from 8 a.m. on Saturday, September 10, 2016, to 9:30 a.m. Sunday, September 11, 2016.

ADDRESSES: The docket for this deviation, [USCG–2016–0814] is available at *http://www.regulations.gov.* Type the docket number in the "SEARCH" box and click "SEARCH". Click on Open Docket Folder on the line associated with this deviation.

FOR FURTHER INFORMATION CONTACT: If you have questions on this temporary deviation, call or email Mr. Michael Thorogood, Bridge Administration Branch Fifth District, Coast Guard, telephone 757–398–6557, email *Michael.R.Thorogood@uscg.mil.*

SUPPLEMENTARY INFORMATION: The North Carolina Department of Transportation, who owns and operates the U.S. 70/Alfred A. Cunningham Bridge, has requested a temporary deviation from the current operating regulations set out in 33 CFR 117.843(a), to ensure the safety of the cyclists and spectators that are associated with the Multiple Sclerosis Society's Historic New Bern Bike Ride.

Under this temporary deviation, the bridge will be maintained in the closed position from 8 a.m. to 9:30 a.m. on Saturday, September 10, 2016, and from 8 a.m. to 9:30 a.m. on Sunday, September 11, 2016. The bridge is a double bascule drawbridge and has a vertical clearance in the closed position of 14 feet above mean high water.

The Trent River is used by small commercial vessels and recreational vessels. The Coast Guard has carefully considered the nature and volume of vessel traffic in publishing this temporary deviation.

Vessels able to pass through the bridge in the closed position may do so at any time. The bridge will be able to open in case of emergencies, there is no immediate alternative route for vessels to pass. The Coast Guard will also inform the users of the waterway through our Local and Broadcast Notice to Mariners of the change in operating schedule for the bridge so that vessel operators can arrange their transits to minimize any impact caused by the temporary deviation.

In accordance with 33 CFR 117.35(e), the drawbridge must return to its regular operating schedule immediately at the end of the effective period of this temporary deviation. This deviation from the operating regulations is authorized under 33 CFR 117.35.

Dated: August 17, 2016.

Hal R. Pitts,

Bridge Program Manager, Fifth Coast Guard District.

[FR Doc. 2016–20232 Filed 8–23–16; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 117

[Docket Number USCG–2016–0707]

Drawbridge Operation Regulation; Upper Mississippi River, Rock Island, IL

AGENCY: Coast Guard, DHS.

ACTION: Notice of deviation from drawbridge regulation.

SUMMARY: The Coast Guard has issued a temporary deviation from the operating schedule that governs the Rock Island Railroad and Highway Drawbridge across the Upper Mississippi River, mile 482.9, at Rock Island, Illinois. The deviation is necessary to facilitate a charity marathon race. This deviation allows the bridge to be maintained in the closed-to-navigation position for four and a half hours.

DATES: This deviation is effective from 7 a.m. to 11:30 a.m., September 25, 2016.

ADDRESSES: The docket for this deviation, (USCG–2016–0707) is available at *http://www.regulations.gov.* Type the docket number in the "SEARCH" box and click "SEARCH". Click on Open Docket Folder on the line associated with this deviation.

FOR FURTHER INFORMATION CONTACT: If you have questions on this temporary deviation, call or email Eric A. Washburn, Bridge Administrator, Western Rivers, Coast Guard; telephone 314–269–2378, email *Eric.Washburn@uscg.mil.*

SUPPLEMENTARY INFORMATION: The U.S. Army Rock Island Arsenal requested a temporary deviation for the Rock Island Railroad and Highway Drawbridge, across the Upper Mississippi River, mile 482.9, at Rock Island, Illinois to remain in the closed-to-navigation position for four and a half hours from 7 a.m. to 11:30 a.m., September 25, 2016 to facilitate the Quad City Marathon.

The Rock Island Railroad and Highway Drawbridge currently operates in accordance with 33 CFR 117.5, which states the general requirement that the drawbridge shall open on signal. There are no alternate routes for vessels transiting this section of the Upper Mississippi River. The bridge cannot open in case of emergency.

The Rock Island Railroad and Highway Drawbridge provides a vertical clearance of 23.8 feet above normal pool in the closed-to-navigation position. Navigation on the waterway consists primarily of commercial tows and recreational watercraft. This temporary deviation has been coordinated with waterway users. No objections were received. The Coast Guard will also inform the users of the waterways through our Local and Broadcast Notices to Mariners of the change in operating schedule for the bridge so that vessel operators can arrange their transits to minimize any impact caused by the temporary deviation.

In accordance with 33 CFR 117.35(e), the drawbridge must return to its regular operating schedule immediately at the end of the effective period of this temporary deviation. This deviation from the operating regulations is authorized under 33 CFR 117.35.

Dated: August 19, 2016.

Eric A. Washburn,

Bridge Administrator, Western Rivers.

[FR Doc. 2016–20265 Filed 8–23–16; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[Docket Number USCG–2016–0735]

RIN 1625–AA00

Safety Zone; Nahant Bay, Marblehead, MA

AGENCY: Coast Guard, DHS.

ACTION: Temporary final rule.

SUMMARY: The Coast Guard is establishing a temporary safety zone on the navigable waters of the Captain of the Port (COTP) Boston Zone within a 2,500-yard radius around a position approximately 6nm Northeast of Nahant Bay, MA, for a Department of Defense (DOD) Training Exercise. The safety zone is needed to protect Navy personnel, support vessels, and the maritime public from the hazards associated with this training exercise. Entering into, transiting through, mooring, or anchoring within this safety zone during periods of enforcement is prohibited unless authorized by the Coast Guard Sector Boston COTP or the COTP's designated representative.

DATES: This rule is effective on August 24, 2016 from 7:00 p.m. through 10:00 p.m.

ADDRESSES: To view documents mentioned in this preamble as being available in the docket, go to *http://www.regulations.gov,* type USCG–2016–0735 in the "SEARCH" box and click "SEARCH." Click on Open Docket Folder on the line associated with this rule.

FOR FURTHER INFORMATION CONTACT: If you have questions on this rule, call or email, Mark Cutter, Sector Boston Waterways Management Division, U.S. Coast Guard; telephone 617–223–4000, email *Mark.E.Cutter@uscg.mil.*

SUPPLEMENTARY INFORMATION:

I. Table of Abbreviations

COTP	Captain of the Port
CFR	Code of Federal Regulations
DHS	Department of Homeland Security
DOD	Department of Defense
FR	Federal Register
NPRM	Notice of Proposed Rulemaking
NAD 83	North American Data of 1983
§	Section
U.S.C.	United States Code

II. Background Information and Regulatory History

The Coast Guard is issuing this temporary rule without prior notice and opportunity to comment pursuant to authority under section 4(a) of the Administrative Procedure Act (APA) (5 U.S.C. 553(b)). This provision authorizes an agency to issue a rule without prior notice and opportunity to comment when the agency for good cause finds that those procedures are "impracticable, unnecessary, or contrary to the public interest." Under 5 U.S.C. 553(b)(B), the Coast Guard finds that good cause exists for not publishing a NPRM with respect to this rule because publishing a NPRM would be impracticable. DOD Training Exercise will take place on August 24, 2016. The DOD Exercise will consist of High-altitude military parachuting freefall insertion approximately 6nm Northeast of Nahant, MA, in position 42° 27.000′ N., 070° 50.000′ W. This exercise will present safety hazards and risks to Navy personnel, support vessels, and the maritime public during the exercise. It would be impracticable to delay promulgating this rule, as it would not be possible to conduct notice and comment rulemaking before the date of the exercise. For this reason, the Coast Guard finds it impracticable to delay this regulation.

We are issuing this rule, and under 5 U.S.C. 553(d)(3), the Coast Guard finds that good cause exists for making it effective less than 30 days after publication in the **Federal Register**. Delaying the effective date of this rule would be impracticable for the same reasons specified above.

III. Legal Authority and Need for Rule

The Coast Guard is issuing this rule under authority in 33 U.S.C. 1231. The

COTP has determined that the potential hazards associated with this DOD Training Exercise create a serious safety concern for anyone transiting within a 2,500-yard radius of position 42° 27.000′ N., 070° 50.000′ W. This rule is needed to protect Navy personnel, vessels, and the normal marine traffic in the navigable waters within the safety zone while this exercise is be being conducted.

IV. Discussion of Rule

This rule establishes a safety zone from 7:00 p.m. until 10:00 p.m. on August 24, 2016. The safety zone will cover all navigable waters within a 2,500-yard radius of position 42° 27.000′ N., 070° 50.000′ W. The duration of the zone is intended to protect Navy personnel, vessels, and normal marine traffic in these navigable waters during the DOD training exercise. No vessel or person will be permitted to enter the safety zone without obtaining permission from the COTP or a designated representative.

V. Regulatory Analyses

We developed this rule after considering numerous statutes and executive orders related to rulemaking. Below we summarize our analyses based on a number of these statutes and executive orders, and we discuss First Amendment rights of protestors.

A. Regulatory Planning and Review

Executive Orders 12866 and 13563 direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits. Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. This rule has not been designated a "significant regulatory action," under Executive Order 12866. Accordingly, it has not been reviewed by the Office of Management and Budget.

This regulatory action determination is based on the size, location, and duration of the safety zone. The implementation of this temporary safety zone is necessary for the protection of all waterway users. The size of the zone is the minimum necessary to provide adequate protection for the waterway users, adjoining areas, and the public. Vessel traffic will be able to safely transit around this safety zone. Any hardships experienced by persons or vessels are considered minimal compared to the interest in protecting the public.

B. Impact on Small Entities

The Regulatory Flexibility Act of 1980, 5 U.S.C. 601–612, as amended, requires Federal agencies to consider the potential impact of regulations on small entities during rulemaking. The term "small entities" comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. The Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities.

While some owners or operators of vessels intending to transit the safety zone may be small entities, for the reasons stated in section V.A above, this rule will not have a significant economic impact on any vessel owner or operator.

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Public Law 104–121), we want to assist small entities in understanding this rule. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency's responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247). The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

C. Collection of Information

This rule will not call for a new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520).

D. Federalism and Indian Tribal Governments

A rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this rule under that Order and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132.

Also, this rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it does not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. If you believe this rule has implications for federalism or Indian tribes, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section above.

E. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of $100,000,000 (adjusted for inflation) or more in any one year. Though this rule will not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

F. Environment

We have analyzed this rule under Department of Homeland Security Management Directive 023–01 and Commandant Instruction M16475.lD, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321–4370f), and have determined that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. This rule involves a safety zone that will prohibit entry within 2,500 yards of position 42° 27.000′ N., 070° 50.000′ W. during the DOD training exercise. It is categorically excluded from further review under paragraph 34(g) of Figure 2–1 of the Commandant Instruction. An environmental analysis checklist supporting this determination and a Categorical Exclusion Determination will be available in the docket where indicated under **ADDRESSES.** We seek any comments or information that may lead to the discovery of a significant environmental impact from this rule.

G. Protest Activities

The Coast Guard respects the First Amendment Rights of protesters. Protesters are asked to contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to coordinate protest activities so that your message can be received without jeopardizing the safety or security of people, places or vessels.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

■ 1. The authority citation for part 165 continues to read as follows:

Authority: 33 U.S.C. 1231; 50 U.S.C. 191; 33 CFR 1.05–1, 6.04–1, 6.04–6, and 160.5; Department of Homeland Security Delegation No. 0170.1.

■ 2. Add § 165.T01–0735 to read as follows:

§ 165.T01–0735 Safety Zone; DOD Training Exercise, Nahant Bay, Marblehead, MA.

(a) *Location.* The following area is a safety zone: All navigable waters within 2,500-yards of 42° 27.000′ N., 070° 50.000′ W. while the DOD Training Exercise is underway.

(b) *Regulations.* While this security zone is being enforced, the following regulations, along with those contained in § 165.33, apply:

(1) Under the general safety zone regulations in subpart B of this part, you may not enter the safety zone described in paragraph (a) of this section unless authorized by the COTP or a COTP designated representative.

(2) To seek permission to enter, contact the COTP or the COTP's representative by VHF–FM channel 16 or by phone at (617) 223–5757 (Sector Boston Command Center). Those in the safety zone must comply with all lawful orders or directions given to them by the COTP or a COTP designated representative.

(c) *Enforcement period.* This section will be enforced from 7:00 p.m. until 10:00 p.m. on August 24, 2016.

(d) *Definitions.* As used in this section, *designated representative* means is any Coast Guard commissioned, warrant, or petty officer or any federal, state, or local law enforcement officer who has been designated by the COTP to act on the COTP's behalf. The COTP's representative may be on a Coast vessel, a Coast Guard Auxiliary vessel, state or local law enforcement, or a location on shore.

(e) *Penalties.* Those who violate this section are subject to the penalties set forth in 33 U.S.C. 1232 and 50 U.S.C. 192.

Dated: August 19, 2016.

C. C. Gelzer,

Captain, U.S. Coast Guard, Captain of the Port Boston.

[FR Doc. 2016–20389 Filed 8–22–16; 4:15 pm]

BILLING CODE 9110–04–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 635

[Docket No. 160328287–6745–02]

RIN 0648–BF94

Atlantic Highly Migratory Species (HMS); Porbeagle Shark Management Measures

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule.

SUMMARY: This final rule implements the International Commission for the Conservation of Atlantic Tunas (ICCAT) Recommendation 15–06 regarding porbeagle sharks (*Lamna nasus*) caught in association with ICCAT fisheries. Recommendation 15–06 requires, among other things, fishing vessels to promptly release unharmed, to the extent practicable, porbeagle sharks caught in association with ICCAT fisheries when brought alive alongside for taking on board the vessel. This action affects fishermen fishing in the commercial highly migratory species (HMS) pelagic longline fishery and the HMS recreational fisheries for tunas, swordfish, and billfish in the Atlantic Ocean, including the Caribbean Sea and Gulf of Mexico. This action implements an ICCAT recommendation, consistent with the Atlantic Tunas Convention Act (ATCA), and will further domestic management objectives under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

DATES: Effective on September 23, 2016.

FOR FURTHER INFORMATION CONTACT: Larry Redd, Carrie Soltanoff, or Karyl Brewster-Geisz by phone at 301–427–8503.

SUPPLEMENTARY INFORMATION:

Background

Atlantic HMS are managed under the 2006 Consolidated HMS Fishery Management Plan (FMP). Implementing regulations at 50 CFR part 635 are issued under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), 16 U.S.C. 1801 *et seq.*, and Atlantic Tunas Convention Act (ATCA), 16 U.S.C. 927 *et seq.* ATCA requires the Secretary of Commerce (Secretary) to promulgate regulations as may be necessary and appropriate to implement ICCAT recommendations.

At its 24th Annual Meeting in 2015, ICCAT adopted Recommendation 15–06 on "Porbeagle [Sharks] Caught in Association with ICCAT Fisheries." Recommendation 15–06 requires, among other things, fishing vessels ". . . to promptly release unharmed, to the extent practicable, porbeagle sharks caught in association with ICCAT fisheries when brought alive alongside for taking on board the vessel." Recommendation 15–06 notes that, according to the ICCAT Standing Committee for Research and Statistics (SCRS), biomass of northwest Atlantic and northeast Atlantic porbeagle sharks is depleted to well below the biomass at maximum sustainable yield, but recent fishing mortality is below the fishing mortality at maximum sustainable yield (*i.e.,* the stocks are overfished but overfishing is not occurring). Recommendation 15–06 further notes that the 2008 and 2012 Ecological Risk Assessments concluded that the porbeagle shark was among the most vulnerable of shark species, which, even at low fishing mortality levels, makes it more susceptible to overfishing. Thus, Recommendation 15–06 was adopted by ICCAT to reduce fishing mortality of porbeagle sharks caught in association with ICCAT fisheries in order to reduce porbeagle shark fishing even further, and thus assist in rebuilding stocks which are currently overfished. On June 15, 2016 (81 FR 39017), NMFS published a proposed rule to consider changes to the regulations at 50 CFR part 635 consistent with Recommendation 15–06. The proposed rule contains details that are not repeated here. The comment period on the proposed rule ended on July 15, 2016.

Domestically, porbeagle sharks are managed pursuant to a rebuilding plan established in Amendment 2 to the 2006 Consolidated HMS FMP (73 FR 35788, June 24, 2008 as corrected at 73 FR 40658, July 15, 2008). Under current regulations, commercial and recreational HMS fishermen that operate in ICCAT fisheries are authorized to retain any porbeagle shark, regardless of whether the shark is dead or alive at haulback. In this final rule, NMFS requires, to the extent practicable, all live porbeagle sharks to be released by commercial and recreational HMS fishermen operating in ICCAT fisheries, as determined by the permits they hold or, in the case of recreational fisheries, whether they have also retained tuna-like species on a given trip.

Response to Comments

During the proposed rule stage, NMFS received 28 written comments. The comments received on the proposed rule during the public comment period can be found at *http://www.regulations.gov/* by searching for NOAA–NMFS–2016–0066. A summary of the relevant comments on the proposed rule are shown below with NMFS' response.

Comment 1: NMFS received comments both in support of, and opposed to, implementing the ICCAT recommendation. Commenters who supported this action stated that the proposed rule was necessary to be consistent with the recommendation adopted by ICCAT. Commenters opposing the proposed rule stated that the porbeagle population in waters off the northeast United States was abundant.

Response: NMFS agrees that this action is consistent with the ICCAT recommendation. Regarding the status of porbeagle sharks, as described in the proposed rule, according to the most recent stock assessment in 2009, which was a joint stock assessment between ICCAT and the International Council for the Exploration of the Sea (ICES), the Northwest Atlantic porbeagle shark stock is depleted well below the biomass at maximum sustainable yield, and recent fishing mortality is below the fishing mortality at maximum sustainable yield. Based on these results, porbeagle sharks are considered to be overfished with no overfishing occurring both domestically and internationally. As cited in Recommendation 15–06, porbeagle sharks are among the most vulnerable shark species, which means that even at low fishing mortality levels, the species is more susceptible to overfishing than other less vulnerable shark species. ICCAT has provisionally scheduled the next porbeagle shark stock assessment for 2019. More information regarding the 2009 stock assessment can be found at *http://www.iccat.int/Documents/SCRS/DetRep/DET-POR.pdf.*

Comment 2: Some commenters noted the need for complete prohibition of porbeagle sharks caught in association with non-ICCAT fisheries given the overfished status of the stock.

Response: This comment is outside the scope of this rulemaking because the purpose of this rulemaking only pertains to implementing ICCAT Recommendation 15–06, consistent with ATCA. ICCAT Recommendation 15–06 pertains to the live release of porbeagle sharks caught in association with ICCAT fisheries and does not address possession of the species in non-ICCAT fisheries. Domestically, porbeagle sharks are managed pursuant to a rebuilding plan established in 2008 in Amendment 2 to the 2006 Consolidated HMS FMP, consistent with the requirements of the Magnuson-Stevens Act.

Comment 3: NMFS received comments stating that NMFS should issue its 12-month finding regarding listing porbeagle sharks under the Endangered Species Act (ESA).

Response: This comment is outside the scope of this rulemaking because the purpose of this rulemaking is to implement ICCAT Recommendation 15–06. The 12-month finding regarding listing porbeagle sharks under the ESA very recently published on August 1, 2016 (81 FR 50463). Any further information regarding the 12-month finding and any subsequent related agency action can be found at *www.federalregister.gov/.*

Comment 4: NMFS received a comment stating that current low interactions between recreational fishermen and porbeagle sharks, in combination with high release rates of the species, does not warrant additional regulations for the recreational fishery.

Response: Under the authority of ATCA and the Magnuson-Stevens Act, NMFS is obligated to promulgate such regulations as may be necessary and appropriate to carry out ICCAT recommendations. Additionally, as stated above, porbeagle sharks are overfished without overfishing occurring. ICCAT Recommendation 15–06 was designed in part to aid in rebuilding this vulnerable shark species. NMFS acknowledges that recreational fishermen interact with few porbeagle sharks and that most fishermen who catch porbeagle sharks release the majority of those sharks alive. Furthermore, the measures in this rulemaking only apply to recreational fishermen that catch porbeagle sharks while also retaining swordfish, billfish, or tuna. This rulemaking does not apply to recreational fishermen that catch porbeagle sharks and do not retain swordfish, billfish, or tuna. As such, this regulation, which requires the live release of porbeagle sharks caught in association with ICCAT fisheries, should have few overall impacts on the recreational fishery.

Comment 5: NMFS received public comments regarding handling and release practices of porbeagle sharks. The commenters highlighted that the proposed changes could result in anglers switching to fishing practices that would ensure porbeagle sharks are dead at haulback in order to allow for retention of any porbeagle shark caught. Other commenters were concerned that the data indicating high release rates of porbeagle sharks in commercial and recreational fisheries were inaccurate because the data were self-reported and did not consider post-release mortality rates of porbeagle sharks.

Response: As described in the proposed rule, HMS logbook and pelagic observer program data indicate that approximately 97 percent of porbeagle sharks were released (alive and dead) from 2010–2015. Additionally, recreational data indicate approximately 90 percent of porbeagle sharks were released from 2010–2015. These data, which are a mix of self-reported and observer data are the best scientific data available and indicate that most porbeagle sharks have not been retained. While the data do not indicate how many sharks released alive would subsequently die as a result of being caught, the ICCAT Recommendation will increase the numbers of porbeagle sharks released alive and thereby likely increase the survival of those sharks and aid in rebuilding.

Regarding handling and release practices, U.S. fishermen who interact with porbeagle sharks have historically followed safe handling and release practices. This regulation requires U.S. fishermen to release live porbeagle sharks in a manner that is largely consistent with the safe handling and release practices that most fishermen employ. NMFS believes and expects that fishermen will continue to follow these safe handling and release practices after implementation of the ICCAT Recommendation 15–06. NMFS will continue to monitor potential violations of Atlantic HMS regulations to ensure that both commercial and recreational fishermen maintain proper catch and release practices.

Comment 6: Several commenters expressed concern that implementing ICCAT Recommendation 15–06 would result in a complete closure of the recreational porbeagle shark fishery.

Response: This final rule will not result in the closure of the recreational porbeagle shark fishery. As described in the proposed rule, implementation of ICCAT Recommendation 15–06 would impact HMS recreational fishermen who retain porbeagle sharks while also retaining swordfish, billfish, or tuna. Under these circumstances, recreational fishermen would have to either discard live porbeagle sharks or the swordfish, billfish, or tuna. If a porbeagle shark were caught that was dead at the time of haulback, a recreational HMS fisherman with swordfish, billfish, or tuna onboard could retain the porbeagle, consistent with all other regulations such as the retention and size limits. Similarly, if a recreational HMS fisherman did not have swordfish, billfish, or tuna onboard, and was not intending to retain any swordfish, billfish, or tunas, that fisherman could retain any porbeagle shark that met the retention and size limits, regardless of the disposition of the shark.

Changes From the Proposed Rule

NMFS made one change to the proposed regulations. At § 635.22 (a)(3), NMFS has added text specifying that the permit holders subject to the applicable requirements of this rulemaking include fishermen who hold a Swordfish General Commercial permit when they are participating in an HMS registered tournament. The proposed rule clearly stated that recreational fishing for porbeagle sharks would be affected when swordfish, tuna, or billfish are retained or possessed on board, or offloaded from, the vessel on a trip. We inadvertently did not list the Swordfish General Commercial permit, even though participation in an HMS registered recreational tournament with such a permit is clearly recreational fishing, and such permit holders had notice of the proposed rule's effect on recreational fishing both through the **Federal Register** Notice and through NMFS outreach, including NMFS' HMS-specific email listserv and NMFS' general email listserv.

It is generally understood that the Swordfish General Commercial permit is similar to the HMS General Category commercial permit in that the permit is considered recreational when the vessel owner or operator is using that vessel in an HMS registered tournament and landings of HMS are allowed, consistent with the regulations. While the regulatory language in the proposed rule did not specifically include this category of permit when listing the permit titles, the rule did repeatedly refer to recreational fisheries, and permit holders could reasonably have anticipated that the prohibition would apply to them given the rule's overall context and content and thus had sufficient notice. The underlying NEPA analysis associated with this rulemaking is not affected by this correction. These fishermen are considered recreational when fishing during a registered HMS tournament, and all such fishing in tournaments was within the scope of what was analyzed; any harvest of porbeagle sharks by these fishermen was analyzed at the proposed rule stage as recreational data. The Regulatory Flexibility Act (RFA) certification is similarly unaffected by this correction. It was based on the recreational information about porbeagle sharks received through the Large Pelagics Survey, which does not distinguish among permit types. Therefore, any recreational harvest of porbeagle sharks by Swordfish General Category permit holders was considered at the proposed rule stage. Furthermore, recreationally-caught porbeagle sharks cannot be sold, limiting the effects analyzed under the RFA.

Classification

The NMFS Assistant Administrator has determined that the final rule is consistent with the 2006 Consolidated HMS FMP and its amendments, the Magnuson-Stevens Act, ATCA, and other applicable law.

This final action has been determined to be not significant for the purposes of Executive Order 12866.

The Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration during the proposed rule stage that this action would not have a significant economic impact on a substantial number of small entities. The factual basis for the certification was published in the proposed rule and is not repeated here. No comments were received regarding this certification. As a result, a regulatory flexibility analysis was not required and none was prepared.

On December 29, 2015, NMFS issued a final rule establishing a small business size standard of $11 million in annual gross receipts for all businesses primarily engaged in the commercial fishing industry (NAICS 11411) for Regulatory Flexibility Act (RFA) compliance purposes only (80 FR 81194, December 29, 2015). The $11 million standard became effective on July 1, 2016, and is to be used in place of the U.S. Small Business Administration's (SBA) current standards of $20.5 million, $5.5 million, and $7.5 million for the finfish (NAICS 114111), shellfish (NAICS 114112), and other marine fishing (NAICS 114119) sectors of the U.S. commercial fishing industry in all NMFS rules subject to the RFA after July 1, 2016. Id. at 81194.

Pursuant to the Regulatory Flexibility Act, and prior to July 1, 2016, a certification was developed for this regulatory action using SBA's former size standards. NMFS has reviewed the analyses prepared for this regulatory action in light of the new size standard. All of the entities directly regulated by this regulatory action are commercial finfish fishing businesses. The new standard could result in fewer commercial finfish businesses being considered small. However, NMFS has determined that the new size standard does not affect its decision to certify this regulatory action. NMFS considers all HMS longline permit holders to be small entities because these vessels have reported annual gross receipts of less than $11 million for commercial fishing. The average annual gross revenue per active pelagic longline vessel was estimated to be $187,000 based on the 170 active vessels between 2006 and 2012 that produced an estimated $31.8 million in revenue annually. The maximum annual revenue for any pelagic longline vessel between 2006 and 2015 was $1.9 million, well below the NMFS small business size threshold of $11 million in gross receipts for commercial fishing. Therefore, NMFS considers all Atlantic Tunas Longline category permit holders to be small entities. Since the annual revenue for Atlantic Tunas Longline category permit holders is well below both the former and new SBA size standard, there continues to be no significant economic impact on a substantial number of small entities.

List of Subjects in 50 CFR Part 635

Fisheries, Fishing, Fishing vessels, Foreign relations, Imports, Penalties, Reporting and recordkeeping requirements, Treaties.

Dated: August 18, 2016.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 635 is amended as follows:

PART 635—ATLANTIC HIGHLY MIGRATORY SPECIES

■ 1. The authority citation for part 635 continues to read as follows:

Authority: 16 U.S.C. 971 *et seq.;* 16 U.S.C. 1801 *et seq.*

■ 2. In § 635.21, add paragraph (c)(1)(iii) to read as follows:

§ 635.21 Gear operation and deployment restrictions.

* * * * *

(c) * * *

(1) * * *

(iii) Has pelagic longline gear on board, persons aboard that vessel are required to release unharmed, to the extent practicable, porbeagle sharks that are alive at the time of haulback.

* * * * *

■ 3. In § 635.22, add paragraph (a)(3) to read as follows:

§ 635.22 Recreational retention limits.

(a) * * *

(3) Vessels issued an HMS General Category permit under § 635.4(d) that are participating in an HMS registered tournament, vessels issued a Swordfish General commercial permit under § 635.4(f) that are participating in an HMS registered tournament, vessels issued a HMS Angling category permit under § 635.4(c), or vessels issued a HMS Charter/Headboat permit under § 635.4(b) are required to release unharmed, to the extent practicable, porbeagle sharks that are alive at the time of haulback if swordfish, tuna, or billfish are retained or possessed on board, or offloaded from, the vessel during that trip.

* * * * *

■ 4. In § 635.24, add paragraph (a)(10) to read as follows:

§ 635.24 Commercial retention limits for sharks, swordfish, and BAYS tunas.

* * * * *

(a) * * *

(10) Notwithstanding other provisions in this paragraph (a), vessels issued a permit under this part that have pelagic longline gear on board or on vessels issued both an HMS Charter/Headboat permit and a commercial shark permit when tuna, swordfish, or billfish are on board the vessel, offloaded from the vessel, or being offloaded from the vessel, are required to release unharmed, to the extent practicable, porbeagle sharks that are alive at the time of haulback.

* * * * *

■ 5. In § 635.71, add paragraph (d)(20) to read as follows:

§ 635.71 Prohibitions.

* * * * *

(d) * * *

(20) Retain, possess, or land porbeagle sharks that were alive at the time of haulback as specified in §§ 635.21(c)(1)(iii), 635.22(a)(3), and 635.24 (a)(10).

* * * * *

[FR Doc. 2016–20157 Filed 8–23–16; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 150916863–6211–02]

RIN 0648–XE833

Fisheries of the Exclusive Economic Zone Off Alaska; Atka Mackerel in the Bering Sea and Aleutian Islands Management Area

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; closure.

SUMMARY: NMFS is prohibiting directed fishing for Atka mackerel in the Central Aleutian district (CAI) of the Bering Sea and Aleutian Islands management area (BSAI) by vessels participating in the BSAI trawl limited access fishery. This action is necessary to prevent exceeding the 2016 total allowable catch (TAC) of Atka mackerel in this area allocated to vessels participating in the BSAI trawl limited access fishery.

DATES: Effective 1200 hrs, Alaska local time (A.l.t.), August 19, 2016, through 2400 hrs, A.l.t., December 31, 2016.

FOR FURTHER INFORMATION CONTACT: Steve Whitney, 907–586–7228.

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the BSAI exclusive economic zone according to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679.

The 2016 TAC of Atka mackerel, in the CAI, allocated to vessels participating in the BSAI trawl limited access fishery was established as a directed fishing allowance of 1,421 metric tons by the final 2016 and 2017 harvest specifications for groundfish in the BSAI (81 FR 14773, March 18, 2016).

In accordance with § 679.20(d)(1)(iii), the Regional Administrator finds that this directed fishing allowance has been reached. Consequently, NMFS is prohibiting directed fishing for Atka mackerel in the CAI by vessels participating in the BSAI trawl limited access fishery.

After the effective dates of this closure, the maximum retainable amounts at § 679.20(e) and (f) apply at any time during a trip.

Classification

This action responds to the best available information recently obtained from the fishery. The Assistant Administrator for Fisheries, NOAA, (AA) finds good cause to waive the requirement to provide prior notice and opportunity for public comment pursuant to the authority set forth at 5 U.S.C. 553(b)(B) as such a requirement is impracticable and contrary to the public interest. This requirement is impracticable and contrary to the public interest as it would prevent NMFS from responding to the most recent fisheries data in a timely fashion and would delay the closure of the Atka mackerel directed fishery in the CAI for vessels participating in the BSAI trawl limited access fishery. NMFS was unable to publish a notice providing time for public comment because the most recent, relevant data only became available as of August 18, 2016. The AA also finds good cause to waive the 30-day delay in the effective date of this action under 5 U.S.C. 553(d)(3). This finding is based upon the reasons provided above for waiver of prior notice and opportunity for public comment.

This action is required by § 679.20 and is exempt from review under Executive Order 12866.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: August 19, 2016.

Alan D. Risenhoover,

Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2016–20317 Filed 8–19–16; 4:15 pm]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 150916863–6211–02]

RIN 0648–XE832

Fisheries of the Exclusive Economic Zone Off Alaska; Pacific Ocean Perch in the Bering Sea and Aleutian Islands Management Area

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; closure.

SUMMARY: NMFS is prohibiting directed fishing for Pacific ocean perch in the Central Aleutian district (CAI) of the Bering Sea and Aleutian Islands management area (BSAI) by vessels participating in the BSAI trawl limited access fishery. This action is necessary to prevent exceeding the 2016 total allowable catch (TAC) of Pacific ocean perch in the CAI allocated to vessels participating in the BSAI trawl limited access fishery.

DATES: Effective 1200 hrs, Alaska local time (A.l.t.), August 19, 2016, through 2400 hrs, A.l.t., December 31, 2016.

FOR FURTHER INFORMATION CONTACT: Steve Whitney, 907–586–7228.

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the BSAI exclusive economic zone according to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679.

The 2016 TAC of Pacific ocean perch, in the CAI, allocated to vessels participating in the BSAI trawl limited access fishery was established as a directed fishing allowance of 618 metric tons by the final 2016 and 2017 harvest specifications for groundfish in the BSAI (81 FR 14773, March 18, 2016).

In accordance with § 679.20(d)(1)(iii), the Regional Administrator finds that this directed fishing allowance has been reached. Consequently, NMFS is prohibiting directed fishing for Pacific ocean perch in the CAI by vessels participating in the BSAI trawl limited access fishery.

After the effective dates of this closure, the maximum retainable amounts at § 679.20(e) and (f) apply at any time during a trip.

Classification

This action responds to the best available information recently obtained from the fishery. The Assistant Administrator for Fisheries, NOAA, (AA) finds good cause to waive the requirement to provide prior notice and opportunity for public comment pursuant to the authority set forth at 5 U.S.C. 553(b)(B) as such a requirement is impracticable and contrary to the public interest. This requirement is impracticable and contrary to the public interest as it would prevent NMFS from responding to the most recent fisheries data in a timely fashion and would delay the closure of the Pacific ocean perch directed fishery in the CAI for vessels participating in the BSAI trawl limited access fishery. NMFS was unable to publish a notice providing time for public comment because the most recent, relevant data only became available as of August 18, 2016. The AA also finds good cause to waive the 30-day delay in the effective date of this action under 5 U.S.C. 553(d)(3). This finding is based upon the reasons provided above for waiver of prior notice and opportunity for public comment.

This action is required by § 679.20 and is exempt from review under Executive Order 12866.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: August 19, 2016.

Alan D. Risenhoover,

Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2016–20308 Filed 8–19–16; 4:15 pm]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 150818742–6210–02]

RIN 0648–XE822

Fisheries of the Economic Exclusive Zone Off Alaska; Deep-Water Species Fishery by Vessels Using Trawl Gear in the Gulf of Alaska

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; closure.

SUMMARY: NMFS is prohibiting directed fishing for species that comprise the deep-water species fishery by vessels using trawl gear in the Gulf of Alaska (GOA). This action is necessary because the third seasonal apportionment of the Pacific halibut bycatch allowance specified for the trawl deep-water species fishery in the GOA has been reached.

DATES: Effective 1200 hours, Alaska local time (A.l.t.), August 20, 2016, through 1200 hours, A.l.t., September 1, 2016.

FOR FURTHER INFORMATION CONTACT: Josh Keaton, 907–586–7228.

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the GOA exclusive economic zone according to the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679.

The third seasonal apportionment of the Pacific halibut bycatch allowance specified for the deep-water species in the GOA by vessels not participating in the cooperative fishery in the Rockfish Program of the Central GOA, is 159 metric tons (mt). This apportionment was established by the final 2016 and 2017 harvest specifications for groundfish of the GOA (81 FR 14740, March 18, 2016) and reapportionment (81 FR 45423, July 14, 2016), for the period 1200 hours, A.l.t., July 1, 2016, through 1200 hours, A.l.t., September 1, 2016.

In accordance with § 679.21(d)(6)(i), the Administrator, Alaska Region, NMFS, has determined that the third seasonal apportionment of Pacific halibut bycatch allowance specified for deep-water species by vessels using trawl gear in the GOA has been reached. Consequently, NMFS is prohibiting directed fishing for the deep-water species by vessels using trawl gear in the GOA. The species and species groups that comprise the deep-water species fishery include sablefish, rockfish, deep-water flatfish, rex sole, and arrowtooth flounder. This closure does not apply to fishing by vessels participating in the cooperative fishery in the Rockfish Program for the Central GOA.

After the effective date of this closure the maximum retainable amounts at § 679.20(e) and (f) apply at any time during a trip.

Classification

This action responds to the best available information recently obtained from the fishery. The Assistant Administrator for Fisheries, NOAA (AA), finds good cause to waive the requirement to provide prior notice and opportunity for public comment pursuant to the authority set forth at 5 U.S.C. 553(b)(B) as such requirement is impracticable and contrary to the public interest. This requirement is impracticable and contrary to the public interest as it would prevent NMFS from responding to the most recent fisheries data in a timely fashion and would delay the closure of the deep-water species fishery by vessels using trawl gear in the GOA. NMFS was unable to publish a notice providing time for public comment because the most recent, relevant data only became available as of August 18, 2016.

The AA also finds good cause to waive the 30-day delay in the effective date of this action under 5 U.S.C. 553(d)(3). This finding is based upon the reasons provided above for waiver of prior notice and opportunity for public comment.

This action is required by § 679.21 and is exempt from review under Executive Order 12866.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: August 19, 2016.

Alan D. Risenhoover,

Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2016–20264 Filed 8–19–16; 4:15 pm]

BILLING CODE 3510–22–P

Proposed Rules

Federal Register
Vol. 81, No. 164
Wednesday, August 24, 2016

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

OFFICE OF PERSONNEL MANAGEMENT

5 CFR Part 532

RIN 3206–AN40

Prevailing Rate Systems; Definition of Kent County, Michigan, and Cameron County, Texas, to Nonappropriated Fund Federal Wage System Wage Areas

AGENCY: U. S. Office of Personnel Management.

ACTION: Proposed rule with request for comments.

SUMMARY: The U.S. Office of Personnel Management (OPM) is issuing a proposed rule that would define Kent County, Michigan, as an area of application county to the Macomb, MI, nonappropriated fund (NAF) Federal Wage System (FWS) wage area and Cameron County, Texas, as an area of application county to the Nueces, TX, NAF FWS wage area. These changes are necessary because there are NAF FWS employees working in Kent and Cameron Counties, and the counties are not currently defined to NAF wage areas.

DATES: We must receive comments on or before September 23, 2016.

ADDRESSES: You may submit comments, identified by "RIN 3206–AN40," using any of the following methods:

Federal eRulemaking Portal: http:// www.regulations.gov. Follow the instructions for submitting comments.

Mail: Brenda L. Roberts, Deputy Associate Director for Pay and Leave, Employee Services, U.S. Office of Personnel Management, Room 7H31, 1900 E Street NW., Washington, DC 20415–8200.

Email: pay-leave-policy@opm.gov.

FOR FURTHER INFORMATION CONTACT: Madeline Gonzalez, by telephone at (202) 606–2838 or by email at *pay-leave-policy@opm.gov.*

SUPPLEMENTARY INFORMATION: OPM is issuing a proposed rule that would define Kent County, MI, as an area of application county to the Macomb, MI, NAF FWS wage area and Cameron County, TX, as an area of application county to the Nueces, TX, NAF FWS wage area. The Veterans Canteen Service (VCS) now employs one NAF FWS employee at VCS #315 in the Wyoming Health Care Center in Kent County and two NAF FWS employees at VCS #740 in the Veterans Affairs Health Care Center at Harlingen in Cameron County.

Under § 532.219 of title 5, Code of Federal Regulations, each NAF wage area "shall consist of one or more survey areas, along with nonsurvey areas, if any, having nonappropriated fund employees." Kent and Cameron Counties do not meet the regulatory criteria under 5 CFR 532.219 to be established as separate NAF wage areas; however, nonsurvey counties may be combined with a survey area to form a wage area. Section 532.219 lists the regulatory criteria that OPM considers when defining FWS wage area boundaries.

OPM recently completed reviews of the definitions of Kent and Cameron Counties and is proposing the changes described below. The Federal Prevailing Rate Advisory Committee, the national labor-management committee responsible for advising OPM on matters concerning the pay of FWS employees, recommended these changes by consensus. These changes would apply on the first day of the first applicable pay period beginning on or after 30 days following publication of the final regulations.

Kent County, MI

Kent County would be defined as an area of application county to the Macomb, MI, NAF FWS wage area. The closest NAF wage area to Kent County is the Macomb wage area. There are no other NAF wage areas in the immediate vicinity of Kent County. VCS #315 is located approximately 175 miles from Selfridge Air National Guard Base, the Macomb wage area's host activity.

With the definition of Kent County to the Macomb NAF wage area, the Macomb wage area would consist of 1 survey county, Macomb County, MI, and 13 area of application counties: Alpena, Calhoun, Crawford, Grand Traverse, Huron, Iosco, Kent, Leelanau, Ottawa, Saginaw, Washtenaw, and Wayne Counties, MI; and Ottawa County, OH.

Cameron County, TX

Cameron County would be defined as an area of application county to the Nueces, TX, NAF FWS wage area. The closest NAF wage area to Cameron County is the Nueces wage area. There are no other NAF wage areas in the immediate vicinity of Cameron County. VCS #740 is located approximately 148 miles from Naval Air Station Corpus Christi, the Nueces wage area's host activity.

With the definition of Cameron County to the Nueces NAF wage area, the Nueces wage area would consist of one survey county, Nueces County, TX, and six area of application counties: Bee, Calhoun, Cameron, Kleberg, San Patricio, and Webb Counties, TX.

Regulatory Flexibility Act

I certify that these regulations would not have a significant economic impact on a substantial number of small entities because they would affect only Federal agencies and employees.

List of Subjects in 5 CFR Part 532

Administrative practice and procedure, Freedom of information, Government employees, Reporting and recordkeeping requirements, Wages.

U.S. Office of Personnel Management.
Beth F. Cobert,
Acting Director.

Accordingly, OPM is proposing to amend 5 CFR part 532 as follows:

PART 532—PREVAILING RATE SYSTEMS

■ 1. The authority citation for part 532 continues to read as follows:

Authority: 5 U.S.C. 5343, 5346; § 532.707 also issued under 5 U.S.C. 552.

■ 2. Appendix D to subpart B is amended by revising the wage area listing for the Macomb, MI, and Nueces, TX, wage areas to read as follows:

Appendix D to Subpart B of Part 532—Nonappropriated Fund Wage and Survey Areas

* * * * *

MICHIGAN
Macomb
Survey Area

Michigan:
Macomb

Area of Application. Survey area plus:

Michigan:
  Alpena
  Calhoun
  Crawford
  Grand Traverse
  Huron
  Iosco
  Kent
  Leelanau
  Ottawa
  Saginaw
  Washtenaw
  Wayne
Ohio:
  Ottawa

* * * * *

TEXAS

* * * * *

Nueces

Survey Area

Texas:
  Nueces

Area of Application. Survey area plus:

* * * * *

Texas:
  Bee
  Calhoun
  Cameron
  Kleberg
  San Patricio
  Webb

* * * * *

[FR Doc. 2016–20179 Filed 8–23–16; 8:45 am]

BILLING CODE 6325–39–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 23

[Docket No. FAA–2016–9001; Notice No. 23–16–02–SC]

Special Conditions: Pilatus Aircraft, Ltd., Model PC–12, PC–12/45, and PC–12/47 Airplanes, Lithium Batteries

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed special conditions.

SUMMARY: This action proposes special conditions for the Pilatus Aircraft, Ltd., Model PC–12, PC–12/45, and PC–12/47 airplanes. This airplane as modified by Finnoff Aviation will have a novel or unusual design feature associated with the installation of a rechargeable lithium battery. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These proposed special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

DATES: Send your comments on or before October 11, 2016.

ADDRESSES: Send comments identified by docket number FAA–2016–9001 using any of the following methods:

☐ *Federal eRegulations Portal:* Go to *http://www.regulations.gov* and follow the online instructions for sending your comments electronically.

☐ *Mail:* Send comments to Docket Operations, M–30, U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE., Room W12–140, West Building Ground Floor, Washington, DC 20590–0001.

☐ *Hand Delivery of Courier:* Take comments to Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

☐ *Fax:* Fax comments to Docket Operations at 202–493–2251.

Privacy: The FAA will post all comments it receives, without change, to *http://regulations.gov,* including any personal information the commenter provides. Using the search function of the docket Web site, anyone can find and read the electronic form of all comments received into any FAA docket, including the name of the individual sending the comment (or signing the comment for an association, business, labor union, etc.). DOT's complete Privacy Act Statement can be found in the **Federal Register** published on April 11, 2000 (65 FR 19477–19478), as well as at *http://DocketsInfo.dot.gov.*

Docket: Background documents or comments received may be read at *http://www.regulations.gov* at any time. Follow the online instructions for accessing the docket or go to the Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m., and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Ruth Hirt, Federal Aviation Administration, Programs and Procedures, ACE–114, Small Airplane Directorate, Aircraft Certification Service, 901 Locust; Kansas City, Missouri 64106; telephone (816) 329–4108; facsimile (816) 329–4090.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite interested people to take part in this rulemaking by sending written comments, data, or views. The most helpful comments reference a specific portion of the special conditions, explain the reason for any recommended change, and include supporting data. We ask that you send us two copies of written comments.

We will consider all comments we receive on or before the closing date for comments. We will consider comments filed late if it is possible to do so without incurring expense or delay. We may change these special conditions based on the comments we receive.

Background

On September 28, 2015, Finnoff Aviation applied for a supplemental type certificate for installation of a rechargeable lithium battery in the Model PC–12, PC–12/45, PC–12/47 airplanes. The Model PC–12, PC–12/45, PC–12/47 airplanes are single-engine turboprop-powered business aircraft that can accommodate up to nine passengers with a take-off weight up to 10,450 lbs.

The current regulatory requirements for part 23 airplanes do not contain adequate requirements for the application of rechargeable lithium batteries in airborne applications. This type of battery possesses certain failure and operational characteristics with maintenance requirements that differ significantly from that of the nickel-cadmium (Ni-Cd) and lead-acid rechargeable batteries currently approved in other normal, utility, acrobatic, and commuter category airplanes. Therefore, the FAA is proposing this special condition to address (1) all characteristics of the rechargeable lithium batteries and their installation that could affect safe operation of the modified Model PC–12, PC–12/45, and PC–12/47 airplanes, and (2) appropriate Instructions for Continued Airworthiness (ICAW) that include maintenance requirements to ensure the availability of electrical power from the batteries when needed.

Type Certification Basis

Under the provisions of § 21.101, Finnoff Aviation must show that the Model PC–12, PC–12/45, and PC–12/47, as changed, continue to meet the applicable provisions of the regulations incorporated by reference in Type Certificate No. A78EU[1] or the applicable regulations in effect on the date of application for the change.

If the Administrator finds that the applicable airworthiness regulations (*i.e.,* 14 CFR part 23) do not contain adequate or appropriate safety standards for the Model PC–12, PC–12/45, and

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[1] *http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgMakeModel.nsf/0/6BCB00B1F3CA4EF886257FED0069EF2D?OpenDocument.*

PC–12/47 airplanes because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions are initially applicable to the model for which they are issued. Should the applicant apply for a supplemental type certificate to modify any other model included on the same type certificate to incorporate the same or similar novel or unusual design feature, the special conditions would also apply to the other model under § 21.101.

In addition to the applicable airworthiness regulations and special conditions, the Model PC–12, PC–12/45, and PC–12/47 airplanes must comply with the fuel vent and exhaust emission requirements of 14 CFR part 34 and the noise certification requirements of 14 CFR part 36.

The FAA issues special conditions, as defined in 14 CFR 11.19, in accordance with § 11.38, and they become part of the type-certification basis under § 21.101.

Novel or Unusual Design Features

The Model PC–12, PC–12/45, and PC–12/47 airplanes will incorporate the following novel or unusual design feature: Installation of a rechargeable lithium battery as the main or engine start aircraft battery.

Discussion

Presently, there is limited experience with use of rechargeable lithium batteries and rechargeable lithium battery systems in applications involving commercial aviation. However, other users of this technology, ranging from personal computers, wireless telephone manufacturers to the electric vehicle industry, have noted safety problems with lithium batteries. These problems include overcharging, over-discharging, flammability of cell components, and cell internal defects described in the following paragraphs:

1. Overcharging: In general, lithium batteries are significantly more susceptible to internal failures that can result in self-sustaining increases in temperature and pressure (*i.e.*, thermal runaway) than the Ni-Cd or lead-acid counterparts. This is especially true for overcharging which causes heating and destabilization of the components of the cell, leading to the formation (by plating) of highly unstable metallic lithium. The metallic lithium may ignite, resulting in a fire or explosion. Finally, the severity of thermal runaway due to overcharging increases with increasing battery capacity and due to a higher amount of electrolyte in large batteries.

2. Over-discharging: Discharge of some types of lithium battery cells beyond a certain voltage (typically 2.4 volts) can cause corrosion of the electrodes of the cell, resulting in loss of battery capacity that cannot be reversed by recharging. This loss of capacity may not be detected by the simple voltage measurements commonly available to flight crews as a means of checking battery status, which is a problem shared with Ni-Cd batteries.

3. Flammability of Cell Components: Unlike Ni-Cd and lead-acid batteries, some types of lithium batteries use liquid electrolytes that are flammable. The electrolyte may serve as a source of fuel for an external fire, if there is a breach of the battery container.

4. Cell Internal Defects: The rechargeable lithium batteries and rechargeable battery systems have a history of undetected cell internal defects. These defects may or may not be detected during normal operational evaluation, test, and validation. This may lead to unsafe conditions when operating in service.

These problems experienced by users of lithium batteries raise concern about the use of these batteries in commercial aviation. The intent of the special condition is to establish appropriate airworthiness standards for lithium battery installations in the Model PC–12, PC–12/45, and PC–12/47 airplanes and to ensure, as required by §§ 23.1309 and 23.601, that these battery installations are neither hazardous nor unreliable.

In summary, the lithium battery installation will consider the following items:

(a) The flammable fluid fire protection requirement is § 23.863. In the past, this rule was not applied to batteries of normal, utility, acrobatic, and commuter category airplanes since the electrolytes utilized in Ni-Cd and lead-acid batteries are not flammable.

(b) New Instructions for Continuous Airworthiness that include maintenance requirements to ensure that batteries used as spares have been maintained in an appropriate state of charge and installed lithium batteries have been sufficiently charged at appropriate intervals. These instructions must also describe proper repairs, if allowed, and battery part number configuration control.

(c) The applicant must conduct a system safety assessment for the failure condition classification of a failure of the battery charging and monitoring functionality (per Advisory Circular AC 23.1309–1E [2]), and develop mitigation to preclude any adverse safety effects. Mitigation may include software, Airborne Electronic Hardware (AEH) or a combination of software and hardware, which should be developed to the appropriate Design Assurance Level(s) (DALs), respectively (per Advisory Circular AC 20–115C [3] and Advisory Circular AC 20–152 [4]).

(d) New requirements, in the proposed special conditions section, address the hazards of overcharging and over-discharging that are unique to lithium batteries, which should be applied to all rechargeable lithium battery and battery installations on the Model PC–12, PC–12/45, and PC–12/47 airplanes in lieu of the requirements of § 23.1353(a)(b)(c)(d)(e), amendment 23–49.

Note 1: These special conditions are not intended to replace § 23.1353(a)(b)(c)(d)(e) at amendment 23–49 in the certification basis of Model PC–12, PC–12/45, and PC–12/47 airplanes. These special conditions apply only to rechargeable lithium batteries and lithium battery systems and their installations. The requirements of § 25.1353 at amendment 23–49 remains in effect for batteries and battery installations on Model PC–12, PC–12/45, and PC–12/47 airplanes that do not use rechargeable lithium batteries.

Applicability

As discussed above, these special conditions are applicable to the Model PC–12, PC–12/45, and PC–12/47 airplanes. Should Finnoff Aviation apply at a later date for a supplemental type certificate to modify any other model included on Type Certificate No. A78EU [5] to incorporate the same novel or unusual design feature, the special conditions would apply to that model as well.

Conclusion

This action affects only certain novel or unusual design features on one model series of airplanes. It is not a rule of general applicability and it affects only the applicant who applied to the FAA for approval of these features on the airplane.

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[2] *http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/719e41e1d26099108625795d005d5302/$FILE/23.1309-1E.pdf.*

[3] *http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/e35fbc0060e2159186257bbe00719fb3/$FILE/AC20-115C.pdf.*

[4] *http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/6d4ae0bf1bde3579862570360055d119/$FILE/AC%2020-152.pdf.*

[5] *http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgMakeModel.nsf/0/6BCB00B1F3CA4EF886257FED0069EF2D?OpenDocument.*

List of Subjects in 14 CFR Part 23

Aircraft, Aviation safety, Signs and symbols.

■ The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

The Proposed Special Conditions

■ Accordingly, the Federal Aviation Administration (FAA) proposes the following special conditions as part of the type certification basis for Pilatus Aircraft, Ltd., Model PC–12, PC–12/45, and PC–12/47 airplanes modified by Finnoff Aviation.

1. Installation of Lithium Batteries must show compliance to the following requirements:

(1) Safe cell temperatures and pressures must be maintained during—

i. Normal operations;

ii. Any probable failure conditions of charging or discharging or battery monitoring system;

iii. Any failure of the charging or battery monitoring system not shown to be extremely remote.

(2) The rechargeable lithium battery installation must be designed to preclude explosion or fire in the event of (1)(ii) and (1)(iii) failures.

(3) Design of the rechargeable lithium batteries must preclude the occurrence of self-sustaining, uncontrolled increases in temperature or pressure.

(4) No explosive or toxic gasses emitted by any rechargeable lithium battery in normal operation or as the result of any failure of the battery charging system, monitoring system, or battery installation which is not shown to be extremely remote, may accumulate in hazardous quantities within the airplane.

(5) Installations of rechargeable lithium batteries must meet the requirements of § 23.863(a) through (d) at amendment 23–34.

(6) No corrosive fluids or gases that may escape from any rechargeable lithium battery may damage surrounding structure or any adjacent systems, equipment, electrical wiring, or the airplane in such a way as to cause a major or more severe failure condition, in accordance with § 23.1309(c) at amendment 23–62 and applicable regulatory guidance.

(7) Each rechargeable lithium battery installation must have provisions to prevent any hazardous effect on structure or essential systems that may be caused by the maximum amount of heat the battery can generate during a short circuit of the battery or of its individual cells.

(8) Rechargeable lithium battery installations must have—

i. A system to automatically control the charging rate of the battery to prevent battery overheating and overcharging, or;

ii. A battery temperature sensing and over-temperature warning system with a means for automatically disconnecting the battery from its charging source in the event of an over-temperature condition, or;

iii. A battery failure sensing and warning system with a means for automatically disconnecting the battery from its charging source in the event of battery failure.

(9) Any rechargeable lithium battery installation functionally required for safe operation of the airplane must incorporate a monitoring and warning feature that will provide an indication to the appropriate flight crewmembers whenever the State of Charge (SOC) of the batteries has fallen below levels considered acceptable for dispatch of the airplane.

(10) The Instructions for Continued Airworthiness required by § 23.1529 at amendment 23–26 must contain maintenance requirements to assure that the battery has been sufficiently charged at appropriate intervals specified by the battery manufacturer and the equipment manufacturer that contain the rechargeable lithium battery or rechargeable lithium battery system. This is required to ensure that lithium rechargeable batteries and lithium rechargeable battery systems will not degrade below specified ampere-hour levels sufficient to power the aircraft system. The Instructions for Continued Airworthiness must also contain procedures for the maintenance of replacement batteries in spares storage to prevent the installation of batteries that have degraded charge retention ability or other damage due to prolonged storage at a low state of charge. Replacement batteries must be of the same manufacturer and part number as approved by the FAA.

Note 2: The term "sufficiently charged" means that the battery will retain enough of a charge, expressed in ampere-hours, to ensure that the battery cells will not be damaged. A battery cell may be damaged by lowering the charge below a point where there is a reduction in the ability to charge and retain a full charge. This reduction would be greater than the reduction that may result from normal operational degradation.

(11) In showing compliance with the proposed special conditions herein, paragraphs (1) through (8), and the RTCA document, Minimum Operational Performance Standards for Rechargeable Lithium Battery Systems, DO–311, may be used. The list of planned DO–311 tests should be documented in the certification or compliance plan and agreed to by the Denver ACO. Alternate methods of compliance other than DO–311 tests must be coordinated with the directorate and Denver ACO.

Issued in Kansas City, Missouri, on August 18, 2016.

Pat Mullen,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2016–20273 Filed 8–23–16; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Parts 16 and 511

[Docket No. FDA–2011–N–0079]

Disqualification of a Clinical Investigator

AGENCY: Food and Drug Administration, HHS.

ACTION: Proposed rule.

SUMMARY: The Food and Drug Administration (FDA) is proposing to amend the regulations for new animal drugs for investigational use to expand the scope of clinical investigator disqualification to include ineligibility to conduct nonclinical laboratory studies. Currently, when the Commissioner of Food and Drugs (the Commissioner) determines that an investigator is ineligible to receive a new animal drug for investigational use, the investigator also is ineligible to conduct any clinical investigation that supports an application for a research or marketing permit for products regulated by FDA. Under this proposal, when the Commissioner determines that an investigator is ineligible to receive a new animal drug for investigational use, the investigator also will be ineligible to conduct any nonclinical study intended to support an application for a research or marketing permit for a new animal drug. This proposal is intended to help ensure adequate protection of animal research subjects and the quality and integrity of data submitted to FDA.

DATES: Submit either electronic or written comments on the proposed rule by November 22, 2016. See section VII of this document for the proposed effective date of a final rule based on this document.

ADDRESSES: You may submit comments as follows:

Electronic Submissions

Submit electronic comments in the following way:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments. Comments submitted electronically, including attachments, to *http://www.regulations.gov* will be posted to the docket unchanged. Because your comment will be made public, you are solely responsible for ensuring that your comment does not include any confidential information that you or a third party may not wish to be posted, such as medical information, your or anyone else's Social Security number, or confidential business information, such as a manufacturing process. Please note that if you include your name, contact information, or other information that identifies you in the body of your comments, that information will be posted on *http://www.regulations.gov*.

- If you want to submit a comment with confidential information that you do not wish to be made available to the public, submit the comment as a written/paper submission and in the manner detailed (see "Written/Paper Submissions" and "Instructions").

Written/Paper Submissions

Submit written/paper submissions as follows:

- *Mail/Hand delivery/Courier (for written/paper submissions):* Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.
- For written/paper comments submitted to the Division of Dockets Management, FDA will post your comment, as well as any attachments, except for information submitted, marked and identified, as confidential, if submitted as detailed in "Instructions."

Instructions: All submissions received must include the Docket No. FDA–2011–N–0079 for "Disqualification of a Clinical Investigator." Received comments will be placed in the docket and, except for those submitted as "Confidential Submissions," publicly viewable at *http://www.regulations.gov* or at the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

- *Confidential Submissions*—To submit a comment with confidential information that you do not wish to be made publicly available, submit your comments only as a written/paper submission. You should submit two copies total. One copy will include the information you claim to be confidential with a heading or cover note that states "THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION." The Agency will review this copy, including the claimed confidential information, in its consideration of comments. The second copy, which will have the claimed confidential information redacted/blacked out, will be available for public viewing and posted on *http://www.regulations.gov*. Submit both copies to the Division of Dockets Management. If you do not wish your name and contact information to be made publicly available, you can provide this information on the cover sheet and not in the body of your comments and you must identify this information as "confidential." Any information marked as "confidential" will not be disclosed except in accordance with 21 CFR 10.20 and other applicable disclosure law. For more information about FDA's posting of comments to public dockets, see 80 FR 56469, September 18, 2015, or access the information at: *http://www.fda.gov/regulatoryinformation/dockets/default.htm*.

Docket: For access to the docket to read background documents or the electronic and written/paper comments received, go to *http://www.regulations.gov* and insert the docket number, found in brackets in the heading of this document, into the "Search" box and follow the prompts and/or go to the Division of Dockets Management, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

Submit written requests for single copies of the guidance to the Policy and Regulations Staff (HFV–6), Center for Veterinary Medicine, Food and Drug Administration, 7519 Standish Pl., Rockville, MD 20855. Send one self-addressed adhesive label to assist that office in processing your requests. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the guidance document.

FOR FURTHER INFORMATION CONTACT: Vernon Toelle, Center for Veterinary Medicine (HFV–230), 7519 Standish Pl., Rockville, MD 20855, 240–402–5637.

SUPPLEMENTARY INFORMATION:

I. Introduction

The current regulations in part 511 (21 CFR part 511) prohibit a disqualified clinical investigator from conducting any clinical investigation that supports an application for a research or marketing permit for products regulated by FDA. We propose to expand the current clinical investigator disqualification regulations in part 511 by providing that a disqualified investigator also is ineligible to conduct any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug. In this document, consistent with our proposal in part 58 (21 CFR part 58) published elsewhere in this issue of the **Federal Register**, the term "nonclinical laboratory study" means in vivo or in vitro experiments in which test articles are studied prospectively in test systems under laboratory conditions or in the applicable environment to determine their safety or toxicity or both. The term does not include studies involving human subjects, clinical studies, or clinical investigational use in animals. The term does not include basic exploratory studies carried out to determine whether a test article has any potential utility or basic exploratory studies to determine the physical or chemical characteristics of a test article.

Under current § 511.1(c) (21 CFR 511.1(c)), a clinical investigator disqualified by the Commissioner is ineligible to receive the test article regulated in part 511 (*i.e.*, a new animal drug for investigational use). Also, under the current regulations in § 511.1(c), a disqualified clinical investigator is ineligible to conduct any clinical investigation that supports an application for a research or marketing permit for products regulated by FDA. However, under the current regulations, a disqualified clinical investigator continues to be eligible to conduct a nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug.

In order to conclude that a clinical investigator is no longer eligible to receive new animal drugs for investigational use, the Commissioner must find that the investigator repeatedly or deliberately failed to comply with the conditions of the exempting regulations or repeatedly or deliberately submitted to FDA or to the sponsor false information in any required report (§ 511.1(c)(2)). When a clinical investigator is disqualified under part 511, the basis for disqualification typically is the repeated or deliberate submission of false information to FDA or a sponsor in a required report. For new animal drugs, the same clinical investigator could conduct both nonclinical laboratory studies and clinical investigations.

In the new animal drug approval process, nonclinical laboratory studies such as those for target animal safety and human food safety may be essential in determining whether to approve an application for a research or marketing permit for a new animal drug. Therefore, this proposal to expand § 511.1(c) to include nonclinical laboratory studies is intended to help ensure adequate protection of animal research subjects and the quality and integrity of data submitted to FDA for the approval of a new animal drug.

Consistent with the proposed changes to the provisions in part 511, we propose amending the list of regulatory provisions under which a part 16 (21 CFR part 16) informal regulatory hearing is available. In part 16, we propose changing the scope of the relevant provision for part 511 to add "any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug."

Concurrent with this proposal, FDA is publishing elsewhere in this issue of the **Federal Register** a related provision in part 58. We propose in § 58.206 (21 CFR 58.206) that a disqualified person under part 58, who is a clinical investigator, would be notified that they are ineligible to receive a test article under part 511. Thus, where this part 511 proposal would make a disqualified clinical investigator ineligible to conduct any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug, the proposal in § 58.206 would make a disqualified person under part 58, who is a clinical investigator, ineligible to receive a test article under part 511. An investigator ineligible to receive a test article under part 511 also would be ineligible to conduct any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug. We propose this action in § 58.206 to help protect the safety and welfare of animal research subjects involved in FDA-regulated nonclinical laboratory studies and clinical investigations, and to help ensure the reliability and integrity of the data submitted to FDA to support FDA decisions concerning new animal drugs.

II. Background

FDA may consider disqualification of a clinical investigator when FDA has information that an investigator has repeatedly or deliberately failed to comply with applicable requirements for the conduct of clinical investigations, or has repeatedly or deliberately submitted to FDA or to the sponsor false information in any required report. Disqualification of an investigator is initiated by the appropriate FDA Center depending upon the particular type of test article (*e.g.,* new animal drug for investigational use) under study by the investigator in the clinical investigation. For example, the Center for Veterinary Medicine (CVM) may pursue disqualification of a clinical investigator who conducted a new animal drug clinical investigation and allegedly submitted to FDA or the sponsor false information in a required report.

The regulations provide the investigator, who is subject to disqualification, an opportunity to be heard and explain the matter complained of, *i.e.,* explain the alleged violations. If the explanation offered is not accepted by the Center, the investigator will be given an opportunity for an informal regulatory hearing under part 16. After evaluating all available information, including any explanation presented by the investigator, the Commissioner issues a Commissioner's decision regarding the eligibility of the investigator to receive a particular type of test article (*e.g.,* a new animal drug for investigational use). When disqualified by a Commissioner's decision, the investigator is no longer eligible to receive the particular type of test article under study when the violations occurred (*e.g.,* new animal drugs). Also, under current regulations, an investigator disqualified by a Commissioner's decision is ineligible to conduct any clinical investigation that supports an application for a research or marketing permit for products regulated by FDA.

Because CVM regulates drugs for animal use, the study subjects are animals in both nonclinical laboratory studies and clinical investigations intended to support the approval of a new animal drug. Nonclinical laboratory studies such as those for target animal safety and human food safety may be essential in determining whether to approve an application for a research or marketing permit for a new animal drug. For animal drug products regulated by CVM, the same investigator may conduct both nonclinical laboratory studies and clinical investigations. For example, CVM's two most recent clinical investigator disqualification matters involved investigators who were also study directors on nonclinical laboratory studies submitted to CVM in support of applications for a new animal drug. In addition, CVM is aware of multiple persons that conduct both clinical investigations and nonclinical laboratory studies intended to support an application for a research or marketing permit for a new animal drug. Therefore, it is critical for CVM to have the authority to disqualify an investigator from conducting nonclinical laboratory studies when that same investigator is disqualified from conducting clinical investigations, particularly when the basis for disqualification is the repeated or deliberate submission of false information to FDA or the sponsor in a required report.

This proposal to amend part 511 to expand a disqualified investigator's ineligibility to conduct any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug would help to ensure adequate protection of animal research subjects and data integrity. This action also may lead to improved public confidence in the nonclinical and clinical data supporting FDA decisions for new animal drug approvals.

We therefore propose that when the Commissioner determines that a clinical investigator is ineligible to receive the test article under the disqualification regulations in part 511 and is therefore ineligible to conduct any clinical investigation that supports an application for a research or marketing permit for products regulated by FDA, the investigator also would be ineligible to conduct any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug.

To effect this change, FDA proposes to amend the current regulations in § 511.1(c).

III. Description of the Proposed Rule

A. Disqualification Proceedings (§ 511.1(c)(1))

Proposed Revisions to § 511.1(c)(1): We propose to change the scope of the question addressed during a part 16 hearing, should the investigator request and be granted an informal hearing, also to include whether the investigator is eligible to conduct any nonclinical laboratory study that is intended to support an application for a research or marketing permit for a new animal drug.

B. Ineligibility To Receive Any Test Article (§ 511.1(c)(2))

Proposed Revisions to § 511.1(c)(2): We propose that an investigator disqualified by a Commissioner's decision also will be ineligible to conduct any nonclinical laboratory study that is intended to support an application for a research or marketing permit for a new animal drug.

Therefore, as proposed, an investigator determined to be ineligible to receive a test article under part 511 also would be ineligible to conduct any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug. This proposal expands the scope of the current regulations in § 511.1(c)(2) which states that a disqualified clinical investigator is ineligible to conduct any clinical investigation that supports an application for a research or marketing permit for products regulated by FDA, including drugs, biologics, devices, new animal drugs, foods, including dietary supplements, that bear a nutrient content claim or a health claim, infant formulas, food and color additives, and tobacco products.

C. Reinstatement (§ 511.1(c)(6))

FDA proposes amending § 511.1(c)(6) for consistency with our proposal to add "any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug" to the part 511 investigator disqualification regulations. Therefore, for consistency with the proposed changes in § 511.1(c)(2), we propose adding in § 511.1(c)(6) that the investigator has presented adequate assurances that the investigator will conduct any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug solely in compliance with the applicable provisions of chapter I.

IV. Regulatory Hearing before the Food and Drug Administration

We propose to revise § 16.1(b)(2) to amend the entry for § 511.1(c)(1) to add "any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug" to be consistent with the other proposed amendments in this rulemaking.

V. Environmental Impact

We have determined under 21 CFR 25.30(h) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

VI. Legal Authority

Under section 701(a) of the FD&C Act (21 U.S.C. 371(a)), FDA is authorized to issue regulations for the efficient enforcement of the FD&C Act. Section 512(j) of the FD&C Act (21 U.S.C. 355(j)) authorizes FDA to issue regulations for exempting from the operation of section 512 of the FD&C Act new animal drugs intended solely for investigational use by experts qualified by scientific training and experience to investigate the safety and effectiveness of animal drugs. An investigator who repeatedly or deliberately violates the regulations or who repeatedly or deliberately submits to FDA or the sponsor false information in a required report would not be considered a qualified expert with the experience required to conduct nonclinical laboratory studies intended to support an application for a research or marketing permit for a new animal drug. This proposed rulemaking would disqualify a clinical investigator from conducting nonclinical laboratory studies intended to support an application for a research or marketing permit for a new animal drug when the Commissioner determines that a clinical investigator is ineligible to receive the test article under the disqualification regulations in part 511. FDA's legal authority to promulgate this proposal regarding clinical investigators exists under sections 512(j) and 701(a) of the FD&C Act, as essential to protection of the public health and safety and to enforcement of the Agency's responsibilities under sections 201, 501, 502, 503, 512, and 701 of the FD&C Act (21 U.S.C. 321, 351, 352, 353, 360b, and 371).

VII. Proposed Effective Date

FDA proposes that any final rule that may issue based on this proposal become effective 30 days after the date of publication of the final rule in the **Federal Register**.

VIII. Preliminary Economic Analysis

FDA has examined the impacts of the proposed rule under Executive Order 12866, Executive Order 13563, the Regulatory Flexibility Act (5 U.S.C. 601–612), and the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4). Executive Orders 12866 and 13563 direct Agencies to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity). The Agency believes that this proposed rule is not a significant regulatory action as defined by Executive Order 12866.

The Regulatory Flexibility Act requires Agencies to analyze regulatory options that would minimize any significant impact of a rule on small entities. Because this proposed rule does not impose new requirements on any entity and therefore has no associated compliance costs, the Agency proposes to certify that the final rule will not have a significant economic impact on a substantial number of small entities.

Section 202(a) of the Unfunded Mandates Reform Act of 1995 requires that Agencies prepare a written statement, which includes an assessment of anticipated costs and benefits, before proposing "any rule that includes any Federal mandate that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100,000,000 or more (adjusted annually for inflation) in any one year." The current threshold after adjustment for inflation is $144 million, using the most current (2014) Implicit Price Deflator for the Gross Domestic Product. FDA does not expect this proposed rule to result in any 1-year expenditure that would meet or exceed this amount.

This proposed rule seeks to expand the scope in part 511 of disqualification of a clinical investigator to include ineligibility to conduct nonclinical laboratory studies. A final rule (77 FR 25353), published on April 30, 2012, prevents a disqualified investigator from conducting any clinical investigation, and therefore applies explicitly to clinical investigations. However, the rule is silent on nonclinical laboratory studies. Thus, under the current regulation in part 511, a disqualified investigator could conduct a nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug. Because the reason typically for disqualification in part 511 is the repeated or deliberate submission of false information to FDA or a sponsor in a required report, preventing a disqualified clinical investigator from performing both nonclinical laboratory studies and clinical investigations is essential to adequate protection of animal research subjects and data integrity.

The Agency would not incur additional costs by expanding the scope in part 511 for disqualification of a clinical investigator. Similarly, we do not expect that industry would incur additional costs because the proposed rule would not require sponsors to perform additional tasks. For instance, upon disqualification, the respective investigator's name is posted on FDA's Web page, and this helps mitigate the employment of the investigator for clinical investigations or nonclinical laboratory studies intended to support an application for a research or marketing permit for a new animal drug. Because the typical reason for disqualification in part 511 is the repeated or deliberate submission of false information to FDA or a sponsor in a required report, the benefit of preventing a disqualified clinical investigator from performing both nonclinical laboratory studies and clinical investigations is enhanced protection of animal research subjects and data integrity.

IX. Paperwork Reduction Act

FDA tentatively concludes that this proposed rule contains no collection of information. Therefore, clearance by OMB under the Paperwork Reduction Act of 1995 is not required.

X. Federalism

We have analyzed this proposed rule in accordance with the principles set forth in Executive Order 13132. We have determined that the proposed rule, if finalized, would not contain policies that would have substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. Accordingly, the Agency tentatively concludes that the proposed rule does not contain policies that have federalism implications as defined in the Executive order and, consequently, a federalism summary impact statement is not required.

List of Subjects

21 CFR Part 16

Administrative practice and procedure.

21 CFR Part 511

Animal drugs, Medical research, Reporting and recordkeeping requirements.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs, it is proposed that parts 16 and 511 be amended as follows:

PART 16—REGULATORY HEARING BEFORE THE FOOD AND DRUG ADMINISTRATION

■ 1. The authority citation for part 16 continues to read as follows:

Authority: 15 U.S.C. 1451–1461; 21 U.S.C. 141–149, 321–394, 467f, 679, 821, 1034; 28 U.S.C. 2112; 42 U.S.C. 201–262, 263b, 364.

■ 2. In § 16.1, in paragraph (b)(2), revise the numerically sequenced entry for § 511.1(c)(1) to read as follows:

§ 16.1 Scope.

* * * * *

(b) * * *

(2) * * *

§ 511.1(c)(1), relating to whether an investigator is eligible to receive test articles under part 511 and eligible to conduct:

(i) Any clinical investigation that supports an application for a research or marketing permit for products regulated by FDA including drugs, biologics, devices, new animal drugs, foods, including dietary supplements, that bear a nutrient content claim or a health claim, infant formulas, food and color additives, and tobacco products; and

(ii) Any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug.

* * * * *

PART 511—NEW ANIMAL DRUGS FOR INVESTIGATIONAL USE

■ 3. The authority citation for part 511 continues to read as follows:

Authority: 21 U.S.C. 321, 351, 352, 353, 360b, 371.

■ 4. In § 511.1, revise the section heading, the last sentences in paragraphs (c)(1) and (2), and revise paragraph (c)(6) to read as follows:

§ 511.1 New animal drugs for investigational use exempt from section 512(a) of the Federal Food, Drug, and Cosmetic Act.

* * * * *

(c) * * *

(1) * * * If an explanation is offered but not accepted by the Center for Veterinary Medicine, the investigator will be given an opportunity for a regulatory hearing under part 16 of this chapter on the question of whether the investigator is eligible to receive test articles under this part and eligible to conduct:

(i) Any clinical investigation that supports an application for a research or marketing permit for products regulated by FDA; and

(ii) Any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug.

(2) * * * The notification also will explain that an investigator determined to be ineligible to receive a test article under this part will be ineligible to conduct

(i) Any clinical investigation that supports an application for a research or marketing permit for products regulated by FDA, including drugs, biologics, devices, new animal drugs, foods, including dietary supplements, that bear a nutrient content claim or a health claim, infant formulas, food and color additives, and tobacco products, and

(ii) Any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug.

* * * * *

(6) An investigator who has been determined to be ineligible under paragraph (c)(2) of this section may be reinstated as eligible when the Commissioner determines that the investigator has presented adequate assurances that the investigator will employ all test articles, and will conduct any clinical investigation that supports an application for a research or marketing permit for products regulated by FDA and any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug, solely in compliance with the applicable provisions of this chapter.

* * * * *

Dated: August 16, 2016.

Peter Lurie,

Associate Commissioner for Public Health Strategy and Analysis.

[FR Doc. 2016–19876 Filed 8–23–16; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 117

[Docket No. FDA–2016–D–2343]

Hazard Analysis and Risk-Based Preventive Controls for Human Food; Draft Guidance for Industry; Availability

AGENCY: Food and Drug Administration, HHS.

ACTION: Notification of availability.

SUMMARY: The Food and Drug Administration (FDA, we, or Agency) is announcing the availability of a draft guidance for industry entitled "Hazard Analysis and Risk-Based Preventive Controls for Human Food: Guidance for Industry." This draft guidance document includes several chapters of a multi-chapter guidance intended to explain our current thinking on how to comply with the requirements for hazard analysis and risk-based preventive controls under our rule entitled "Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Human Food."

DATES: Although you can comment on any guidance at any time (see 21 CFR 10.115(g)(5)), to ensure that we consider your comment on this draft guidance before we issue the final version of the guidance, submit either electronic or written comments on the draft guidance by February 21, 2017.

ADDRESSES: You may submit comments as follows:

Electronic Submissions

Submit electronic comments in the following way:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments. Comments submitted electronically, including attachments, to *http://www.regulations.gov* will be posted to the docket unchanged. Because your comment will be made public, you are solely responsible for ensuring that your comment does not include any confidential information that you or a third party may not wish to be posted, such as medical information, your or anyone else's Social Security number, or confidential business information, such as a manufacturing process. Please note that if you include your name, contact information, or other information that identifies you in the body of your comments, that information will be posted on *http://www.regulations.gov.*
- If you want to submit a comment with confidential information that you do not wish to be made available to the public, submit the comment as a written/paper submission and in the manner detailed (see "Written/Paper Submissions" and "Instructions").

Written/Paper Submissions

Submit written/paper submissions as follows:

- *Mail/Hand delivery/Courier (for written/paper submissions):* Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.
- For written/paper comments submitted to the Division of Dockets Management, FDA will post your comment, as well as any attachments, except for information submitted, marked and identified, as confidential, if submitted as detailed in "Instructions."

Instructions: All submissions received must include the Docket No. FDA–2016–D–2343 for "Hazard Analysis and Risk-Based Preventive Controls for Human Food: Guidance for Industry." Received comments will be placed in the docket and, except for those submitted as "Confidential Submissions," publicly viewable at *http://www.regulations.gov* or at the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

- *Confidential Submissions*—To submit a comment with confidential information that you do not wish to be made publicly available, submit your comments only as a written/paper submission. You should submit two copies total. One copy will include the information you claim to be confidential with a heading or cover note that states "THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION." The Agency will review this copy, including the claimed confidential information, in its consideration of comments. The second copy, which will have the claimed confidential information redacted/blacked out, will be available for public viewing and posted on *http://www.regulations.gov.* Submit both copies to the Division of Dockets Management. If you do not wish your name and contact information to be made publicly available, you can provide this information on the cover sheet and not in the body of your comments and you must identify this information as "confidential." Any information marked as "confidential" will not be disclosed except in accordance with 21 CFR 10.20 and other applicable disclosure law. For more information about FDA's posting of comments to public dockets, see 80 FR 56469, September 18, 2015, or access the information at: *http://www.fda.gov/regulatoryinformation/dockets/default.htm.*

Docket: For access to the docket to read background documents or the electronic and written/paper comments received, go to *http://www.regulations.gov* and insert the docket number, found in brackets in the heading of this document, into the "Search" box and follow the prompts and/or go to the Division of Dockets Management, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

Submit written requests for single copies of the draft guidance to Office of Food Safety, Center for Food Safety and Applied Nutrition, Food and Drug Administration (HFS–300), 5001 Campus Dr., College Park, MD 20740. Send two self-addressed adhesive labels to assist that office in processing your request. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the draft guidance.

FOR FURTHER INFORMATION CONTACT: Jenny Scott, Center for Food Safety and Applied Nutrition (HFS–300), Food and Drug Administration, 5001 Campus Dr., College Park, MD 20740, 240–402–2166.

SUPPLEMENTARY INFORMATION:

I. Background

The FDA Food Safety Modernization Act (FSMA) (Pub. L. 111–353) enables FDA to better protect public health by helping to ensure the safety and security of the food supply. It enables FDA to focus more on preventing food safety problems rather than relying primarily on reacting to problems after they occur. FSMA recognizes the important role industry plays in ensuring the safety of the food supply, including the adoption of modern systems of preventive controls in food production.

Section 103 of FSMA amended the Federal Food, Drug, and Cosmetic Act (the FD&C Act), in section 418 of the FD&C Act (21 U.S.C. 350g), by adding requirements for hazard analysis and risk-based preventive controls for establishments that are required to register as food facilities under our regulations, in 21 CFR part 1, subpart H, in accordance with section 415 of the FD&C Act (21 U.S.C. 350d). We have established regulations to implement these requirements within part 117 (21 CFR part 117).

We are announcing the availability of several chapters of a multi-chapter draft guidance for industry entitled "Hazard Analysis and Risk-Based Preventive Controls for Human Food." We are issuing the draft guidance consistent with our good guidance practices regulation (21 CFR 10.115). The draft guidance, when finalized, will represent the current thinking of FDA on this topic. It does not establish any rights for any person and is not binding on FDA or the public. You can use an alternate approach if it satisfies the requirements of the applicable statutes and regulations.

The multi-chapter draft guidance for industry is intended to explain our current thinking on how to comply with the requirements for hazard analysis and risk-based preventive controls under part 117, principally in subparts C and G. The chapters that we are announcing in this document are as follows:

- Introduction
- Chapter One—The Food Safety Plan
- Chapter Two—Conducting a Hazard Analysis
- Chapter Three—Potential Hazards Associated with the Manufacturing, Processing, Packing, and Holding of Human Food
- Chapter Four—Preventive Controls
- Chapter Five—Application of Preventive Controls and Preventive Control Management Components

We intend to announce the availability for public comment of additional chapters of the draft guidance as we complete them.

II. Paperwork Reduction Act of 1995

This draft guidance refers to previously approved collections of information found in FDA regulations. These collections of information are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520). The collections of information in part 117 have been approved under OMB control number 0910–0751.

III. Electronic Access

Persons with access to the Internet may obtain the draft guidance at either *http://www.fda.gov/FoodGuidances or http://www.regulations.gov.* Use the FDA Web site listed in the previous sentence to find the most current version of the guidance.

Dated: *August 18, 2016.*

Jeremy Sharp,

Deputy Commissioner for Policy, Planning, Legislation, and Analysis.

[FR Doc. 2016–20177 Filed 8–23–16; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 558

[Docket No. FDA–2016–N–1896]

New Animal Drugs for Use in Animal Feed; Category Definitions

AGENCY: Food and Drug Administration, HHS.

ACTION: Proposed rule.

SUMMARY: The Food and Drug Administration (FDA, the Agency, we) proposes to amend the animal drug regulations by revising the definitions of the two categories of new animal drugs used in medicated feeds to base category assignment only on approved uses in major animal species. The proposed revision will preserve the availability of medicated feeds intended for therapeutic use in minor animal species and prevent a significant disincentive for future development of additional minor species therapies.

DATES: Submit either electronic or written comments by November 7, 2016.

ADDRESSES: You may submit comments as follows:

Electronic Submissions

Submit electronic comments in the following way:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments. Comments submitted electronically, including attachments, to *http://www.regulations.gov* will be posted to the docket unchanged. Because your comment will be made public, you are solely responsible for ensuring that your comment does not include any confidential information that you or a third party may not wish to be posted, such as medical information, your or anyone else's Social Security number, or confidential business information, such as a manufacturing process. Please note that if you include your name, contact information, or other information that identifies you in the body of your comments, that information will be posted on *http://www.regulations.gov.*
- If you want to submit a comment with confidential information that you do not wish to be made available to the public, submit the comment as a written/paper submission and in the manner detailed (see "Written/Paper Submissions" and "Instructions").

Written/Paper Submissions

Submit written/paper submissions as follows:

- *Mail/Hand delivery/Courier (for written/paper submissions):* Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.
- For written/paper comments submitted to the Division of Dockets Management, FDA will post your comment, as well as any attachments, except for information submitted, marked and identified, as confidential, if submitted as detailed in "Instructions."

Instructions: All submissions received must include the Docket No. FDA–2016–N–1896 for "Category Definitions for Minor Species." Received comments will be placed in the docket and, except for those submitted as "Confidential Submissions," publicly viewable at *http://www.regulations.gov* or at the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

- *Confidential Submissions*—To submit a comment with confidential information that you do not wish to be made publicly available, submit your comments only as a written/paper submission. You should submit two copies total. One copy will include the information you claim to be confidential with a heading or cover note that states "THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION." The Agency will review this copy, including the claimed confidential information, in its consideration of comments. The second copy, which will have the claimed confidential information redacted/blacked out, will be available for public viewing and posted on *http://www.regulations.gov.* Submit both copies to the Division of Dockets Management. If you do not wish your name and contact information to be made publicly available, you can provide this information on the cover sheet and not in the body of your comments and you must identify this information as "confidential." Any information marked as "confidential" will not be disclosed except in accordance with 21 CFR 10.20 and other applicable disclosure law. For more information about FDA's posting of comments to public dockets, see 80 FR 56469, September 18, 2015, or access the information at: *http://www.fda.gov/regulatoryinformation/dockets/default.htm.*

Docket: For access to the docket to read background documents or the electronic and written/paper comments received, go to *http://www.regulations.gov* and insert the docket number, found in brackets in the heading of this document, into the "Search" box and follow the prompts and/or go to the Division of Dockets Management, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: David Edwards, Center for Veterinary Medicine (HFV–220), Food and Drug Administration, 7519 Standish Pl., Rockville, MD 20855, 240–402–6205, email: *david.edwards@fda.hhs.gov.*

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I. Executive Summary

A. Purpose of the Proposed Rule

FDA proposes to revise the definitions of the two categories of new animal drugs used in medicated feeds to base category assignment only on approved uses in major animal species. This revision is being proposed to address a potential consequence of animal drug sponsor cooperation in implementing a strategy initiated by the FDA Center for Veterinary Medicine (CVM) to address antimicrobial resistance by taking measures to ensure the judicious use of antimicrobial drugs in animal agriculture. Under this program, sponsors of antimicrobial new animal drugs that also have importance in human medicine were requested to voluntarily withdraw approval of production (*e.g.*, growth production, feed efficiency) indications for their drug products that are intended for use in the feed or water of food-producing animals. Based on the existing drug category definitions, the voluntary withdrawal of production indications by these drug sponsors would, in some cases, result in a change to a medicated feed drug's category, potentially leading to additional consequences not foreseen at the time the program was initiated.

The category in which a new animal drug used in medicated feeds is placed is based on their likelihood of producing unsafe residues in the edible products of treated animals. Category I consists of those drugs that require no withdrawal period at the lowest use level in each species for which they are approved. Category II consists of those drugs that require a withdrawal period at the lowest use level for at least one species for which they are approved, or that are regulated on a "no-residue" basis or with a zero tolerance because of a carcinogenic concern, regardless of whether a withdrawal period is required.

New animal drugs approved for use in medicated feeds are approved as Type A medicated articles, the most concentrated form of the drug product for use by feed mills. Category I Type A medicated articles can be handled by both licensed and unlicensed feed mills, whereas Category II Type A medicated articles can be handled only by licensed feed mills.

Certain Category I Type A medicated articles would be recategorized to Category II when a production indication is voluntarily withdrawn by a sponsor as part of the judicious use initiative that is currently underway, based on the next lowest use level that remains once the production use is withdrawn having a withdrawal period such that the drug would then meet the definition for Category II. For Category I Type A medicated articles that include indications for minor species, FDA is concerned that if such a Type A medicated article is recategorized to Category II based on a withdrawal period for an approved therapeutic use in a minor species, sponsors may opt to request withdrawal of approval of these minor species indications in order to ensure the Type A medicated article can remain in Category I. Sponsors may also decline to pursue development of additional therapies for minor species if these uses would require a withdrawal period that would trigger a recategorization to Category II.

The proposed revisions would revise the category definitions such that they would be based only on whether a withdrawal period is required for a major species.[1] Under the proposed definition, a Category I Type A medicated article would not be recategorized to Category II based on the existence of a withdrawal period for an approved indication in a minor species, even if that minor species indication is the next lowest approved use level that remains after the production indication has been withdrawn. However, if the next lowest use level (apart from the minor species indication) is an indication approved for use in a major species that has a withdrawal period, under the new definition the drug would move to Category II.

The purpose of the proposed revision is to preserve the present availability of medicated feeds intended for therapeutic use in minor species and to prevent a significant disincentive for future development of additional therapies for minor species. We believe the proposed revision will not compromise public health due to the comparatively lower exposure by humans to potential drug residues in edible tissues of food-producing minor species inherent in their less frequent consumption.

B. Summary of the Major Provisions of the Proposed Rule

FDA proposes to amend 21 CFR 558.3 *Definitions and general considerations applicable to this part* (§ 558.3) to base the definition for each of the two categories (Category I and Category II) of new animal drugs used in medicated feeds only on approved uses in major species. Definitions for "major species" and "minor species" are also being added to this section.

C. Legal Authority

We are proposing these regulations based on our authority under the new animal drug provisions in section 512 (21 U.S.C. 360b) and section 701 (21 U.S.C. 371) of the Federal Food, Drug, and Cosmetic Act (FD&C Act) which gives the Agency general rulemaking authority to issue regulations for the efficient enforcement of the FD&C Act.

D. Costs and Benefits

The revisions made by this proposed rule are intended to preserve the availability of medicated feeds intended for therapeutic use in minor animal species. In addition, these proposed revisions will prevent a significant disincentive for future development of additional therapies for minor species. No additional costs or benefits will accrue from this rulemaking.

II. Background

FDA is proposing to revise the definitions of the two categories of new animal drugs used in medicated feeds to base category assignment only on approved uses in major animal species. To strengthen the Agency's medicated feed program, FDA issued a final rule in the **Federal Register** of March 3, 1986 (51 FR 7382), which, among other things, established two categories of new animal drugs used in medicated feeds. As discussed in the final rule, the Agency placed these drugs into categories based on their likelihood of producing unsafe residues in the edible products of treated animals (51 FR 7382). Category I consists of those drugs that require no withdrawal period at the lowest use level in each species for which they are approved. Category II consists of those drugs that require a withdrawal period at the lowest use level for at least one species for which they are approved, or that are regulated on a "no-residue" basis or with a zero tolerance because of a carcinogenic concern, regardless of whether a withdrawal period is required.

New animal drugs approved for use in medicated feeds are approved as Type A medicated articles, the most concentrated form of the drug product for use by feed mills. Category I Type A medicated articles can be handled by both licensed and unlicensed feed mills, whereas Category II Type A medicated articles can be handled only by licensed feed mills.

This action is being taken to address a potential consequence of animal drug sponsor cooperation in implementing a strategy initiated by CVM to address antimicrobial resistance by taking measures to ensure the judicious use of antimicrobials of importance to human medicine (*i.e.*, medically important antimicrobials) in animal agriculture. Specifically, CVM's initiative to ensure the judicious use of medically important antimicrobial drugs in animal agriculture advocates two specific changes to the approved conditions of use of medically important antimicrobials that are administered through the medicated feed or water of food-producing animals.

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[1] As a practical matter, categorization under the revised definitions in this direct final rule will be driven by approved indications for major food-producing species (cattle, poultry, swine, and turkeys). While the definition for major species includes horses, dogs, and cats, they are not regulated as food-producing major species and thus drugs approved for use in these species do not require an assessment of human food safety that may result in assignment of a withdrawal period. Minor species are defined as animals, other than humans, that are not major species. Minor species include animals such as sheep, goats, ducks, geese, and aquaculture species such as catfish, salmon, and trout.

These changes, which are described in Guidance for Industry (GFI) #213, "New Animal Drugs and New Animal Drug Combination Products Administered in or on Medicated Feed or Drinking Water of Food-Producing Animals: Recommendations for Drug Sponsors for Voluntarily Aligning Product Use Conditions with GFI #209," published December 2013 (*http://www.fda.gov/downloads/AnimalVeterinary/GuidanceComplianceEnforcement/GuidanceforIndustry/UCM299624.pdf*), are intended to reduce the development of antimicrobial resistance and thereby preserve the effectiveness of these important drugs for use in treating infections in humans. Following publication of GFI #213, all sponsors of these medically important antimicrobial new animal drug products approved for use in the feed or water of food-producing animals notified FDA in writing of their intent to voluntarily make changes to their affected products as outlined in the guidance.

Under GFI #213, sponsors of medically important antimicrobial new animal drugs approved for over-the-counter use in the feed or water of food-producing animals were asked to change the marketing status of their products to veterinary prescription (Rx) marketing status in the case of new animal drugs administered in water, or to veterinary feed directive (VFD) marketing status for drugs administered in or on animal feed. New animal drugs with Rx or VFD marketing status can legally only be used with a veterinarian's oversight. Prescription animal drugs require a veterinarian's prescription, while use of VFD drugs requires a VFD; both types of orders must be issued by a licensed veterinarian in the course of the veterinarian's professional practice.

In addition, under GFI #213 sponsors of medically important new animal drugs used in animal feed or water that have production indications were requested to voluntarily withdraw these indications; approved therapeutic indications for use of these drugs would remain.

In some instances, once a sponsor withdraws the production indication from a drug approved for use in animal feed (which is generally the lowest use level of the drug), the remaining lowest therapeutic use level will require a withdrawal period. Based on the existing definitions of the feed drug categories, this results in a Category I new animal drug being recategorized as a Category II drug, the more restrictive of the two possible categories of drugs used in medicated feed. Category II drugs require that the manufacture of Type B and Type C medicated feeds from Type A medicated articles be done in facilities possessing a medicated feed mill license, which number roughly 900 in the United States. In contrast, there are tens of thousands of unlicensed feed mills in this country. Such a recategorization to Category II, thereby limiting the use of the Type A medicated article to a much smaller subset of feed mills, may disrupt the existing movement of these medicated feeds through distribution channels.

FDA believes that sponsors may request voluntary withdrawal of those specific therapeutic indications as a way to keep their products in the less restrictive Category I when the recategorization of a drug to Category II is triggered by a therapeutic indication for a minor species. For certain drug products, the only therapeutic indications requiring a withdrawal period that would remain following the voluntary withdrawal of approval of production uses are those for minor species. The loss of therapeutic indications for minor species would adversely affect the availability of therapeutic medicated feeds necessary for the health of minor species, which is a matter of significant concern for the Agency.

This foreseeable adverse effect on the health of minor species would directly undermine the intent of Congress in passing the Minor Use and Minor Species Animal Health Act of 2004 (Pub. L. 108–282) as well as to our intent in establishing the implementing regulations under that statute. The Category I drugs likely to be affected have been safely used in this category for decades, and we have no reason to believe they would not continue to be safely used in this category moving forward.

Under the current category definitions in § 558.3 for feed use drugs, a drug will be included in Category II if the lowest use level of the drug in any approved species requires a withdrawal period. This approach equates the existence of a withdrawal period for a particular use with the potential risk that edible tissues from animals administered a medicated feed might contain a residue of concern.

However, the toxicological analysis of animal drugs used to calculate a withdrawal period is based on lifetime exposure by humans to potential drug residues. This assessment of lifetime exposure does not consider the lower risk to the public health from the use of these same new animal drugs in food-producing minor species attributable to the lower human consumption over time of edible tissues from food-producing minor species (Refs. 1 and 2). For this reason, FDA does not at this time believe this revision of the category definitions presents a risk to the public health.

In a manner similar to its effect on drug indications that are already approved, CVM believes the existing categorization scheme would pose a significant disincentive for future development of additional minor species therapies for existing Category I drugs if those new uses would require a withdrawal period and thus trigger a change to Category II for that drug.

Given the potential for implementation of GFI #213 to result in the foreseeable consequence of the withdrawal of approval of needed therapeutic indications for minor species, we propose to revise the definitions of the two categories of new animal drugs used in medicated feeds in § 558.3 to base category assignment only on uses in major species. This proposed revision is expected to preserve the availability of drugs intended for therapeutic use in minor species and also prevent a significant disincentive for future development of additional therapies for minor species without compromising public health.

III. Proposed Regulation

FDA proposes to amend paragraphs (b)(1)(i) and (ii) of this Agency's regulations at § 558.3 (*Definitions and general considerations applicable to this part*) to base the definition for each of the two categories (Category I and Category II) of new animal drugs used in medicated feeds only on approved uses in major species. We further propose to amend § 558.3(b) by adding definitions for "major species" and "minor species" that are identical to the definitions of those terms found in FDA's regulations for new animal drugs for minor use and minor species (21 CFR 516.3). We are proposing to revise the feed drug category definitions in § 558.3 to preserve the availability of medicated feeds intended for use in minor species and to prevent a likely disincentive for development of additional therapies for minor species.

IV. Companion Document to Direct Final Rulemaking

This proposed rule is a companion to the direct final rule published elsewhere in this issue of the **Federal Register**. FDA proposes to amend § 558.3(b)(1) to revise the definitions of Category I and Category II new animal drugs administered in medicated feed. This proposed rule is intended to make noncontroversial changes to existing regulations. The Agency does not anticipate receiving any significant adverse comment on this rule.

Consistent with FDA's procedures on direct final rulemaking, we are publishing elsewhere in this issue of the **Federal Register** a companion direct final rule. The direct final rule and this companion proposed rule are substantively identical. This companion proposed rule provides the procedural framework within which the rule may be finalized in the event the direct final rule is withdrawn because of any significant adverse comment. The comment period for this proposed rule runs concurrently with the comment period of the companion direct final rule. Any comments received in response to the companion direct final rule will also be considered as comments regarding this proposed rule.

FDA is providing a comment period for the proposed rule of 75 days after the date of publication in the **Federal Register**. If FDA receives a significant adverse comment, we intend to withdraw the direct final rule before its effective date by publication of a notice in the **Federal Register** within 30 days after the comment period ends. A significant adverse comment is one that explains why the rule would be inappropriate, including challenges to the rule's underlying premise or approach, or would be ineffective or unacceptable without a change. In determining whether an adverse comment is significant and warrants withdrawing a direct final rule, the Agency will consider whether the comment raises an issue serious enough to warrant a substantive response in a notice-and-comment process in accordance with section 553 of the Administrative Procedure Act (5 U.S.C. 553).

Comments that are frivolous, insubstantial, or outside the scope of the proposed rule will not be considered significant or adverse under this procedure. For example, a comment recommending a regulation change in addition to those in the proposed rule would not be considered a significant adverse comment unless the comment states why the proposed rule would be ineffective without the additional change.

If FDA does not receive significant adverse comment in response to the companion direct final rule, the Agency will publish, within 30 days after the comment period ends, a document in the **Federal Register** confirming the effective date of the final rule. The Agency intends to make the direct final rule effective on December 1, 2016.

A full description of FDA's policy on direct final rule procedures may be found in a guidance document announced in the **Federal Register** of November 21, 1997 (62 FR 62466). The guidance document may be accessed at: *http://www.fda.gov/Regulatory Information/Guidances/ucm125166.htm.*

V. Legal Authority

We are proposing these regulations under the legal authority provided by section 512 of the FD&C Act relating to new animal drugs and section 701(a) of the FD&C Act. Section 512 gives FDA the authority to approve new animal drug applications (NADAs). Such approval establishes conditions of use under which the drug can be used in a safe and effective manner. Categorization of new animal drugs used in medicated feeds is one such condition of use. In addition, section 701(a) of the FD&C Act gives FDA general rulemaking authority to issue regulations for the efficient enforcement of the FD&C Act.

VI. Economic Analysis of Impacts

We have examined the impacts of the proposed rule under Executive Order 12866, Executive Order 13563, the Regulatory Flexibility Act (5 U.S.C. 601–612), and the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4). Executive Orders 12866 and 13563 direct us to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity). We believe that this proposed rule is not a significant regulatory action as defined by Executive Order 12866.

The Regulatory Flexibility Act requires us to analyze regulatory options that would minimize any significant impact of a rule on small entities. Because this proposed rule would not impose any compliance costs on the sponsors of animal drug products that are currently marketed or in development, we propose to certify that this proposed rule will not have a significant economic impact on a substantial number of small entities.

The Unfunded Mandates Reform Act of 1995 (section 202(a)) requires us to prepare a written statement, which includes an assessment of anticipated costs and benefits, before proposing "any rule that includes any Federal mandate that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100,000,000 or more (adjusted annually for inflation) in any one year." The current threshold after adjustment for inflation is $146 million, using the most current (2015) Implicit Price Deflator for the Gross Domestic Product. This proposed rule would not result in an expenditure in any year that meets or exceeds this amount.

This proposed rule allows certain new animal drugs approved for use in animal feed that would otherwise be recategorized as Category II drugs under the current definitions in § 558.3 following withdrawal of approval of production indications during GFI #213 implementation to remain in Category I if the change to Category II would have been triggered by a minor species indication.

Based on the revised definitions of the two feed drug categories, there is one drug, sulfamerazine for control of furunculosis in trout (21 CFR 558.582), that would be recategorized from Category II to Category I as a result of this proposed rule, if finalized. No compliance costs would be incurred due to this recategorization because no changes to the approved application are required for continued marketing of the drug.

VII. Analysis of Environmental Impact

We have determined under 21 CFR 25.30(h) that this action is of a type that will not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

VIII. Paperwork Reduction Act of 1995

This proposed rule contains no collection of information. Therefore, clearance by the Office of Management and Budget under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520) is not required.

IX. Federalism

We have analyzed this proposed rule in accordance with the principles set forth in Executive Order 13132. We have determined that the proposed rule does not contain policies that have substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. Accordingly, we have concluded that the proposed rule does not contain policies that have federalism implications as defined in the Executive order and, consequently, a federalism summary impact statement is not required.

X. References

The following references are on display in the Division of Dockets Management (see **ADDRESSES**) and are available for viewing by interested persons between 9 a.m. and 4 p.m., Monday through Friday; they are also available electronically at *http://www.regulations.gov.* FDA has verified the Web site addresses, as of the date this document publishes in the **Federal Register**, but Web sites are subject to change over time.)

1. U.S. Department of Agriculture, "Livestock & Meat Domestic Data," *http://www.ers.usda.gov/data-products/livestock-meat-domestic-data* (accessed on June 23, 2016).

2. "Food Fish Production and Sales by Species, by Size Category, by State and United States: 2005," *http://www.agcensus.usda.gov/Publications/2002/Aquaculture/aquacen2005_08.pdf* (accessed on June 23, 2016).

List of Subjects in 21 CFR Part 558

Animal drugs, animal feeds.

Therefore, under the Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs and redelegated to the Center for Veterinary Medicine, it is proposed that part 558 be amended as follows:

PART 558—NEW ANIMAL DRUGS FOR USE IN ANIMAL FEEDS

■ 1. The authority citation for part 558 continues to read as follows:

Authority: 21 U.S.C. 354, 360b, 360ccc, 360ccc–1, 371.

■ 2. In § 558.3, revise paragraphs (b)(1)(i) and (ii) and add paragraphs (b)(13) and (14) to read as follows:

§ 558.3 Definitions and general considerations applicable to this part.

* * * * *

(b) * * *

(1) * * *

(i) Category I—These drugs require no withdrawal period at the lowest use level in each major species for which they are approved or are approved for use only in minor species.

(ii) Category II—These drugs require a withdrawal period at the lowest use level for at least one major species for which they are approved, or are regulated on a "no-residue" basis or with a zero tolerance because of carcinogenic concern regardless of whether a withdrawal period is required in any species.

* * * * *

(13) "Major species" means cattle, horses, swine, chickens, turkeys, dogs, and cats.

(14) "Minor species" means animals, other than humans, that are not major species.

Dated: August 18, 2016.

Jeremy Sharp,

Deputy Commissioner for Policy, Planning, Legislation, and Analysis.

[FR Doc. 2016–20149 Filed 8–23–16; 8:45 am]

BILLING CODE 4164–01–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 70

[EPA–HQ–OAR–2016–0194; FRL–9951–09–OAR]

RIN 2060–AS61

Revisions to the Petition Provisions of the Title V Permitting Program

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA) proposes to revise its regulations to streamline and clarify processes related to submission and review of title V petitions. This notice covers five key areas, each of which should increase stakeholder access to and understanding of the petition process and aid the EPA's review of petitions. First, the EPA is proposing regulatory provisions that provide direction as to how petitions should be submitted to the agency. Second, the EPA is proposing regulatory provisions that describe the expected format and minimum required content for title V petitions. Third, the proposal clarifies that permitting authorities are required to respond to significant comments received during the public comment period for draft title V permits, and to provide that response with the proposed title V permit to the EPA for the agency's 45-day review period. Fourth, guidance is provided in the form of "recommended practices" for various stakeholders to help ensure title V permits have complete administrative records and comport with the requirements of the Clean Air Act (CAA or Act). Fifth, to increase familiarity with the post-petition process, this notice presents information on the agency's interpretation of certain title V provisions of the CAA and its implementing regulations regarding the steps following an EPA objection in response to a title V petition, as previously discussed in specific title V orders.

DATES: *Comments:* Comments must be received on or before October 24, 2016.

Public Hearing: If anyone contacts EPA requesting a public hearing on or before September 6, 2016, we will hold a public hearing. Additional information about the hearing would be published in a subsequent **Federal Register** notice.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2016–0194, to the *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or withdrawn. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information the disclosure of which is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.,* on the Web, Cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *http://www2.epa.gov/dockets/commenting-epa-dockets.*

FOR FURTHER INFORMATION CONTACT: Questions concerning these proposed rule revisions should be addressed to Ms. Carrie Wheeler, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Air Quality Planning Division, (C504–05), Research Triangle Park, NC 27711, telephone number (919) 541–9771, email at *wheeler.carrie@epa.gov.* To request a public hearing or information pertaining to a public hearing on the proposed regulatory revisions, contact Ms. Pamela Long, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Air Quality Policy Division, (C504–01), Research Triangle Park, NC 27711; telephone number (919) 541–0641; fax number (919) 541–5509; email address: *long.pam@epa.gov* (preferred method of contact).

SUPPLEMENTARY INFORMATION: The information presented in this document is organized as follows:

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F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments
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I. National Technology Transfer and Advancement Act
J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations.
K. Determination Under Section 307(d)
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I. General Information

A. Does this action apply to me?

Entities potentially affected directly by the proposed revisions to the EPA's regulations include anyone who intends to submit a title V petition on a proposed title V permit prepared by a state, local or tribal title V permitting authority pursuant to its EPA-approved title V permitting program. Entities also potentially affected by this rule include state, local and tribal permitting authorities responsible for implementing the title V permitting program. Entities not directly affected by this proposed rule include owners and operators of major stationary sources or other sources that are subject to title V permit requirements, as well as the general public who would have an interest in knowing about title V permitting actions and associated public hearings but do not intend to submit a petition.

B. What should I consider as I prepare my comments for the EPA?

1. *Submitting CBI.* Do not submit this information to the EPA through *http://www.regulations.gov* or email. Clearly mark the specific information that you claim to be CBI. For CBI in a disk or CD–ROM that you mail to the EPA, mark the outside of the disk or CD–ROM as CBI and then identify electronically within the disk or CD–ROM the specific information that is claimed as CBI. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket.

2. *Tips for preparing comments.* When preparing and submitting your comments, see the commenting tips at *http://www.epa.gov/dockets/comments.html.*

C. How can I find information about a possible public hearing?

To request a public hearing or information pertaining to a public hearing, contact Ms. Pamela Long, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, by phone at (919) 541–0641 or by email at *long.pam@epa.gov.*

D. Where can I obtain a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this **Federal Register** document will be posted at the regulations section of our Title V Operating Permits Web site, under Regulatory Actions, at *http://www.epa.gov/title-v-operating-permits/current-regulations-and-regulatory-actions.* A "track changes" version of the full regulatory text that incorporates and shows the full context of the proposed changes to the existing regulations in this proposal is also available in the docket for this rulemaking.

II. Overview of Proposed Regulatory Revisions and Information in This Notice

Title V of the CAA establishes an operating permit program. Section 505 of the CAA requires permitting authorities to submit a proposed title V permit to the EPA Administrator for review for a 45-day review period before issuing the permit as final. The Administrator shall object to issuance of the permit within that 45-day review period if the Administrator determines that the permit contains provisions that are not in compliance with the applicable requirements under the CAA. If the Administrator does not object to the permit during the 45-day EPA review period, any person may petition the Administrator within 60 days after the expiration of the 45-day review period to take such action (hereinafter "title V petition" or "petition"). The title V petition provisions of the current implementing regulations found at 40 CFR part 70 largely mirror the CAA, and have not been revised since original promulgation in 1992. With 20 years of experience with title V petitions as well as feedback from various stakeholders, the agency is now proposing changes to 40 CFR part 70 intended to provide clarity and transparency to the petition process, and to improve the efficiency of that process.[1]

The changes proposed and the information provided in the preamble to the proposal are intended to benefit permitting authorities, permitted sources, and potential petitioners, as well as the EPA. Permitting authorities and permitted sources are expected to benefit by early consultation with the appropriate EPA Regional Office when the permitting authority is preparing a permit to ensure it includes conditions that assure compliance with applicable requirements under the CAA and part 70). These early actions should minimize potential permit deficiencies and reduce the associated likelihood that a petition will be submitted on that title V permit.

Potential petitioners are expected to benefit by having better notification of permits and review deadlines (*e.g.*, the EPA is proposing to post on EPA Regional Web sites when a proposed permit is received and the corresponding 60-day deadline for submitting a petition) and by better access to permitting decision information (*e.g.,* the permitting authority's written response to comments). These updates will clarify the expected minimum content of petitions and provide a standardized format, simplifying the process and enhancing the likelihood that petitions will be clear and complete. In addition, potential petitioners may also derive a benefit from more efficient responses to petitions and a better understanding of the process.

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[1] The revisions proposed in this rule only impact 40 CFR part 70, which applies to federally-approved state, local, and tribal operating permit programs; 40 CFR part 71, which covers the title V operating permit program for permits issued under the EPA's federal permitting authority, utilizes a different administrative review process, through the Environmental Appeals Board (EAB). The EAB has its own review process for title V permits issued under 40 CFR part 71 that is separate and distinct from the process of petitioning the Administrator for an objection to a 40 CFR part 70 permit; thus, these proposed changes are intended to streamline and clarify the EPA's title V petition review process under 40 CFR part 70 only.

The EPA is expected to benefit by improving the agency's ability to meet its statutory obligations to review proposed permits, respond to title V petitions and provide more transparency in the title V petition process. These were concerns expressed by a Clean Air Act Advisory Committee task force in recommendations provided to the agency in 2006.[2] The EPA believes that the proposed regulatory revisions and shared information are responsive to these concerns and could, if finalized, improve the efficiency of the agency's response.

The proposed regulatory revisions described in Section IV of this notice would, among other things: (1) Provide direction as to how title V petitions should be submitted to the agency, including encouraging the use of an electronic submittal system as the preferred (but not exclusive) method to submit title V petitions; (2) describe mandatory content and format for title V petitions, which is intended to clarify the process for petitioners and improve the EPA's ability to review and act on petitions efficiently; and (3) require permitting authorities to respond in writing to significant comments received during the public comment period on a draft title V permit and to provide that written response to the EPA along with the proposed title V permit at the start of the EPA's 45-day review period. This proposal also requests comment on the proposed revisions to the regulations governing the CAA title V petition process, as well as comment on questions related to potentially establishing page limits on title V petitions. The proposed revisions to the 40 CFR part 70 regulations are described more fully in Section IV of this notice.

Separate from the regulatory revisions proposed in Section IV, Section V.A of this notice provides guidance on "recommended practices" for permit development for various stakeholders that, when followed, helps to ensure permits have complete administrative records and comport with the requirements of the CAA. Lastly, to increase stakeholder familiarity with the post-petition process, Section V.B. provides information concerning the agency's interpretation of certain provisions of title V of the CAA and the implementing regulations at part 70 regarding the steps following an EPA objection in response to a title V petition, as previously discussed in specific title V orders. The following paragraphs briefly provide additional information on each area.

First, in order to reduce confusion with and add clarity to the process of submitting title V petitions, the EPA has developed a centralized point of entry for all title V petitions using an electronic submittal system. As described in Section IV.A of this notice, the EPA encourages petitioners to use this electronic system when submitting title V petitions, which will improve customer service by allowing for better access to and tracking of petitions. This is the preferred method identified in the proposed regulatory revisions that would be acceptable to use to submit a title V petition to the agency. Alternative methods for submittal are also identified in this notice.

Second, with regard to petition content, the EPA is proposing regulatory revisions that would specify requirements for mandatory petition content and standard formatting for all petitions. This is expected to benefit potential petitioners by ensuring completeness while promoting streamlining and improving the EPA's ability to review and act on petitions efficiently. In its orders responding to title V petitions, the EPA has already identified key elements that are critical for demonstrating that a title V permit does not assure compliance with applicable requirements under the CAA or under the part 70 regulations, and has explained their relevance to its determinations. In this proposal, the EPA is proposing new regulatory language to codify what has already been discussed in prior orders. If finalized, petitioners would be expected to follow these requirements and include this content following a standard format. As described later in this notice and in the proposed regulatory text, this content includes identifying where the issue being raised in the title V petition was raised during the public comment period on the draft title V permit and addressing the permitting authority's response to the comment in the petition in order to demonstrate that an objection is warranted.

Along with the proposed changes and requests for comment regarding petition content and format in Section IV.B of this notice, the EPA proposes to add new regulatory language to 40 CFR 70.8 that would require a petitioner to send a copy of the petition to both the permitting authority and the permit applicant. The current title V regulations do not have provisions implementing this requirement of section 505(b)(2) of the Act. Therefore, this rule proposes to insert a requirement into the part 70 rules mirroring the Act's requirement in order to ensure consistency with this provision of the statute.

Third, Section IV.C of this notice contains requirements for certain procedures related to responding to significant public comments on the draft title V permit, as well as the administrative record for and submittal of proposed title V permits to the EPA by permitting authorities. The changes being proposed now would require that all permitting authorities respond to significant comments received on draft permits. The EPA is also proposing that the 45-day review period under section 505(b)(1) would not begin until the permitting authority forwards the proposed permit, the written response to comments (RTC) or statement that no public comments were received, and the statement of basis document, to the EPA for its review. These changes are expected to benefit permitting authorities and permitted sources by resulting in a more complete permit record and greater clarity for all stakeholders. If finalized, these changes may result in a need to revise at least some state, local and tribal part 70 programs.

In addition to these three areas, as part of the agency's effort to share information with stakeholders about the title V petition process, this notice includes guidance to help ensure permits have complete administrative records and comport with the requirements of the CAA. Presented in the form of "recommended practices" for stakeholders, this guidance is shared in the spirit of providing information and context to give a more comprehensive view of the title V petition process, including the time before a petition may be filed. Following the suggested recommended practices contained in Section V.A of this notice is expected to positively affect the permit issuance process resulting in better permits and may reduce the likelihood that a title V petition will be submitted on a title V permit.

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[2] In 2004, the Clean Air Act Advisory Committee (CAAAC) established a Task Force to evaluate the title V program. The 18-member panel, comprised of industry, state, and environmental group representatives, identified what Committee members believed was and was not working well. After hosting public meetings and receiving written feedback, and compiling the information with the personal experience of panel members, the Title V Task Force issued a final report that highlighted concerns and recommendations for improvement. *See, Final Report to the Clean Air Act Advisory Committee on the Title V Implementation Experience: Title V Implementation Experience* (April 2006). The Title V Task Force Final Report is available at: *https://www.epa.gov/caaac/caaac-reports.*

All four of the previously mentioned areas should help to improve title V permits issued by permitting authorities, promote access to and provide better understanding of the title V petition process for potential petitioners, and reduce delays in decisions and support the agency's efforts to meet its obligations in responding to title V petitions. The proposed revisions to the part 70 regulations associated with the first three key areas are anticipated to increase transparency and add clarity to the title V petition submittal, review, and response processes. Codifying existing practices into title V regulations of the CAA is also expected to make the EPA petition review process more efficient. In addition, providing "recommended practices" for stakeholders, including some related to permit issuance, also increases transparency and clarity to further improve the stakeholder experience and understanding surrounding title V petitions.

Section V.B of this notice discusses steps following the EPA's issuance of an objection in response to a title V petition, particularly where the state, local, or tribal permitting authority subsequently amends the permit terms and conditions and/or the permit record in response to the EPA's objection. This process is often referred to as the post-petition process. The information provided in Section V.B reflects interpretations of certain statutory and regulatory provisions related to this aspect of the title V petition process that have previously been discussed by the EPA, including in title V petition orders. This information is repeated as a convenience to stakeholders and the general public: The agency is not proposing to alter its interpretation of that process in this notice and the regulatory revisions proposed in this notice do not relate to or modify this interpretation. The agency is not soliciting comment on this interpretation or otherwise reopening or revising the already-issued title V petition orders or other EPA documents in which it has previously been discussed. Rather, this discussion is included to provide additional transparency and clarity.

Finally, as a convenience to stakeholders and the general public, and to provide context and background that informs how the EPA determines whether to grant an objection and to promote awareness of the EPA's existing interpretation of key provisions of section 505(b)(2) of the Act, Section III.D of this notice includes a summary of some past orders responding to title V petitions and court decisions addressing the burden on a title V petitioner to demonstrate that an objection is warranted.

III. Background

A. The Title V Operating Permits Program

Congress amended the CAA in 1990 to add title V, now found at 42 U.S.C. 7661–7661f, to assist in compliance and enforcement of air pollution controls. CAA Amendments of 1990, Public Law 101–549, sections 501–507, 104 Stat. 2399, 2635–48 (1990). Before this, the CAA pollution control requirements that might apply to a particular source could be found in many different provisions of the Act and its numerous regulations. As one court opinion has described it: "Before 1990, regulators and industry were left to wander through this regulatory maze in search of the emission limits and monitoring requirements that might apply to a particular source. Congress addressed this confusion in the 1990 Amendments by adding title V of the Act, which created a national permit program that requires many stationary sources of air pollution to obtain permits that include relevant emission limits and monitoring requirements." *Sierra Club* v. *EPA,* 536 F.3d 673, 674 (D.C. Cir. 2008).

Accordingly, title V of the Act establishes an operating permits program for major sources of air pollutants, as well as certain other sources. CAA section 502(a). Under title V of the CAA, states were required to develop and submit to EPA for approval title V permitting programs consistent with program requirements promulgated by the EPA. Those requirements are now found in 40 CFR part 70. Most states, certain local agencies, and one tribe have approved part 70 programs.[3] As part of an approved part 70 program, title V of the CAA requires every major source and certain other sources to apply for and operate pursuant to an operating permit. CAA sections 502(a) and 503; *see also* 40 CFR 70.5(a) and 70.1(b). It further requires that the permits contain conditions that assure compliance with all of the sources' applicable requirements under the Act, including the requirements of the applicable implementation plan. CAA section 504(a); *see also* 40 CFR 70.1(b) and 70.6(a)(1).

Prior to the title V program, CAA requirements for major sources of air pollutants were implemented in multiple and various ways. As a lawmaker involved in the 1990 CAA Amendments explained:

> Title V creates, for the first time, a unifying permit program for facilities subject to the [A]ct's various control requirements. In the past, some provisions of the Clean Air Act—for example, the nonattainment and PSD new source requirements—were, and will continue to be, implemented through preconstruction permits. Other control requirements were effected without Federal, or in some cases, State permits—for example, NESHAPS and NSPS—although States often incorporated these requirements into their own permit programs.[4]

More specifically, a title V permit must contain enforceable emission limits and standards, including operational requirements and limitations, and such other conditions as necessary to assure compliance with all applicable requirements that apply to the source at the time of permit issuance, as well as the monitoring, recordkeeping, and reporting requirements to assure compliance. In sum, the title V permit program is a vehicle for ensuring that air quality control requirements are appropriately applied to a source's emission units and for assuring compliance with such requirements.

For the most part, title V of the CAA does not impose new pollution control requirements on sources. The definition of "applicable requirements" in the part 70 regulations includes many standards and requirements that are established through other CAA programs, such as standards and requirements under sections 111 and 112 of the Act, and terms and conditions of preconstruction permits issued under the New Source Review programs. 40 CFR 70.2. Once those air quality control requirements are established in those other programs, they are incorporated into a source's title V permits as appropriate. Hence, a title V permit is a comprehensive document that identifies all the specific CAA requirements that must be met by a source in order to operate. Developing such a comprehensive document can be a complex process that involves some harmonization of all the source's applicable requirements. As a lawmaker involved in the 1990 CAA Amendments explained:

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[3] The Southern Ute Indian Tribe has an EPA-approved operating permit program under 40 CFR part 70.

[4] 136 Cong. Rec. E3663, E3673 (1990) (Speech of Rep. Michael Bilirakis), *reprinted in* Environment and Natural Resources Policy Division of the Congressional Research Service of the Library of Congress, 6 A Legislative History of the Clean Air Act Amendments of 1990, at 10768 (1993) [hereinafter CAAA Leg. Hist.].

> The creation of the new permit program in title V provides an opportunity and an obligation for EPA to harmonize the substantive provisions of the other titles in this complex legislation. Many of the same sources and pollutants will be controlled under multiple titles—the same facilities and pollutants will often be controlled under the hazardous air pollutant, nonattainment, and acid rain programs. EPA must make every effort to harmonize and prevent unproductive duplication among those titles. The permit provisions of title V provide a focus for this harmonization, although title V does not change, and gives EPA no authority to modify, the substantive provisions of these other titles.[5]

As this language suggests, in providing an opportunity for harmonization through title V of the CAA, Congress did not replace or remove the procedures and requirements for establishing substantive requirements that exist in other provisions of the CAA. Nor did Congress alter or supplant the opportunities for public participation and administrative and judicial review that are found in other CAA programs, such as those for public participation and judicial review of certain final agency actions under section 307 of the Act. In addition, the Act requires that title V permitting programs provide opportunities for public participation in title V permitting processes and an opportunity for judicial review in state court. CAA section 502(b)(6); *see also* 40 CFR 70.4(b)(3)(x) (judicial review) and 70.7(h) (public participation). The petition process co-exists with those provisions, without superseding them.

Although title V of the CAA does not generally impose new pollution control requirements on sources, it does require that certain procedural measures be followed especially with respect to assuring compliance with underlying applicable requirements, and it also requires sources to pay certain fees. For example, title V of the CAA requires permits to contain adequate monitoring, recordkeeping, and reporting provisions to assure sources' compliance with permit terms and conditions. *See* CAA 504(c); *Sierra Club* v. *EPA,* 536 F.3d 673 (D.C. Cir. 2008). The part 70 regulations contain monitoring rules designed to satisfy this statutory requirement. Finally, as an additional measure to ensure permits are in compliance with the CAA, the title V program provides for public participation at various steps in the permitting process, including the opportunity to submit a title V petition.

B. Statutory and Regulatory Basis for This Proposal

In general terms, as noted above, the title V permit program was a significant development that established new procedural requirements for permitting authorities and sources. In crafting the program, Congress balanced the benefit of a single document that contains all applicable requirements of the Act with the need to process these complex documents in an efficient manner. As part of the effort to promote efficient implementation of the operating permits program, the provisions relating to title V objections establish an orderly process with specific deadlines, which give the EPA an opportunity to raise objections to a title V permit before it is issued and which give any person the opportunity to timely raise specific issues to the EPA through a title V petition. In light of the complexities of implementing a program of title V's scope, a statement of one lawmaker in the legislative history indicates that the opportunity to "challenge EPA's failure to object" through the petition process was "designed to avoid delays" while preserving the discretion of both the EPA and the states.[6]

More specifically, under CAA section 505(a), and the current implementing regulations found at 40 CFR 70.8(a), permitting authorities are required to submit each proposed title V permit to the EPA for review.[7] Upon receipt of a proposed permit and all necessary supporting information, the Administrator has 45 days in which to object to the final issuance of the permit if he/she determines that the proposed permit is not in compliance with applicable requirements of the Act, including the requirements of the applicable state implementation plan (SIP), or part 70 requirements. CAA section 505(b)(1) and 40 CFR 70.8(c)(1).

As the EPA explained when proposing the initial title V regulations in 1991, the Act limits the EPA's opportunity for its initial review and an objection based on that review to 45 days in order to minimize delays. 56 FR 21749 (May 10, 1991). If the Administrator objects under CAA 505(b)(1), he/she must provide a statement of the reasons for the objection, providing a copy of both the objection and the statement to the permit applicant. CAA 505(b)(1); *see also* 40 CFR 70.8(c)(1).

If the Administrator does not object during the 45-day review period, consistent with section 505(b)(2) of the CAA and 40 CFR 70.8(d), any person may petition the Administrator within 60 days after the expiration of the EPA's 45-day review period to object to the permit. The Administrator shall grant or deny such a petition within 60 days after it is filed. CAA section 505(b)(2) establishes several requirements related to such petitions. Among other things, it provides that such a petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise objections during that period or the grounds for objection arose after completion of the public comment period. It also provides that the Administrator shall issue an objection if the petitioner demonstrates that the permit is not in compliance with the requirements of the CAA, including the requirements of the applicable implementation plan.

The implementing regulations are found in 40 CFR 70.8(d) and largely mirror this provision. As the EPA explained in proposing the initial title V regulations, the title V petition opportunity serves an important purpose because title V permits are frequently complex documents, and given the brevity of the agency review period there may be occasions when the EPA does not recognize that certain permit provisions are not in compliance with applicable requirements of the Act. 56 FR 21751 (May 10, 1991). CAA section 505(b)(2) states that the Administrator "shall" object if the petitioner makes the required demonstration. If the Administrator denies a petition for an objection, CAA 505(b)(2) provides that denial is subject to judicial review under CAA section 307; however, under CAA section 505(c), no objection is subject to judicial review until the Administrator has taken final action to issue or deny the permit. Further, the requirements under CAA section 505(b)(2) may not be delegated by the Administrator.

In addition to the provisions of title V, the rulemaking of provisions under CAA section 307(d) are relevant to this notice. The Administrator is applying the rulemaking provisions of CAA section 307(d) to the rulemaking discussed in this notice, pursuant to

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[5] 136 Cong. Rec. E3663, E3673 (1990) (Speech of Rep. Michael Bilirakis), *reprinted in* 6 CAAA Leg. Hist., at 10768 (1993).

[6] 136 Cong. Rec. E3663, E3675 (1990) (Speech of Rep. Michael Bilirakis), *reprinted in* 6 CAAA Leg. Hist. at 10774.

[7] As the part 70 rules in 70.8(c) and (d) largely mirror the Act's provisions, the statutory and regulatory requirements are addressed together in this background discussion.

CAA section 307(d)(1)(V), which provides that the provisions of 307(d) apply to "such other actions as the Administrator may determine."

C. Title V Petition Process and Content

After 20 years of experience in implementing the title V petition process, the EPA has identified some general trends in petition content and aspects of the petition review process that pose challenges for potential petitioners in preparing petitions and for the EPA in providing an efficient response to petitions. These are described in this section of the notice to provide additional context for this proposal. This proposed rulemaking is aimed in part at increasing stakeholder access to and understanding of the petition process and increasing the efficiency of the agency's response to petitions received and at mitigating some of the factors that contribute to poorly prepared or incomplete petitions, misunderstanding of applicable permit and CAA requirements, and longer response times. These factors include: (1) The lack of administrative requirements around petition submittals, which results in a variety of inconsistent methods used by petitioners; (2) the lack of specific rules regarding petition content, which results in considerable inconsistency in the format and content of petitions; and (3) the need to often deal with numerous and highly complex issues that arise in title V petitions given that title V permits must address many applicable requirements. These include issues relating to compliance with the requirements of the prevention of significant deterioration (PSD) permitting program, the hazardous air pollutant program (*i.e.*, requirements implementing the provisions of CAA 112), and other air quality issues. For example, petitioners often raise issues related to compliance with the requirements of the major and minor preconstruction permit programs, such as the PSD permitting requirements found in part C of Title I of the Act. This permitting program has a separate process under the CAA, its implementing regulations and SIPs, for evaluating applicability of the permitting requirements, determining the appropriate terms and conditions for permits, and for public participation and administrative and/or judicial review of those permits. At times, the PSD issues raised in the context of a title V petition relate to projects that occurred a considerable time in the past, and in some situations, the title V permit record may not contain all the relevant information for understanding the determinations that were made. For these reasons, consideration of these issues in the title V petition context can be time-consuming to research and complex to resolve, even to come to the seemingly simple determination that the permit record is inadequate. Further, title V petitions frequently include lengthy arguments that primarily concern CAA programmatic or policy issues, rather than the terms of a particular permit.

Over time, petitions have raised increasingly more complex policy, legal, and technical matters. Through the review of such extensive and complicated petitions, the petition review process has evolved into a resource-intensive effort by the EPA. To increase stakeholder understanding of the title V petition process, help ensure consistent presentation of critical information in such petitions, and facilitate more efficient review of them, the EPA is proposing to revise its regulations to establish procedural parameters which, if finalized, would govern the title V petition process moving forward. As described in more detail in Section IV of this notice, this proposal includes proposed requirements for petition submittal, petition content and format, and certain administrative record requirements. As mentioned previously, one of the primary goals of the proposed changes is to improve stakeholder access to and understanding of the petition process and improve the agency's ability to meet its statutory obligations to review proposed permits and respond to title V petitions, in light of the overall structure of the CAA.

Yet another overarching factor that hampers the current petition review process is the confusion or lack of familiarity with the process itself. In the 2006 Title V Task Force Final Report noted earlier, for example, the CAAAC task force expressed a concern with the lack of transparency in the title V petition process. This concern has been echoed in the years since the 2006 report through feedback the agency has received from various stakeholders. In response, the EPA has tried to provide more explanation and insight into the title V petition process in the administrative orders it issues in responding to petitions. Some of these issues have also been discussed in the opinions courts have issued in reviewing such EPA orders. However, the EPA expects that not all stakeholders, including the public, may have read these response orders or related court decisions.

Therefore, the next section of this notice seeks to provide additional transparency concerning the petition process by repeating some of the relevant interpretations of statutory and regulatory provisions that the EPA has previously explained in title V petition orders, as well as interpretations of certain provisions related to the title V petition process provided in judicial opinions. Reiterating these prior statements concerning the EPA's application and interpretation of the statute to reviewing title V petitions may also provide useful context for the proposed changes to 40 CFR part 70, which are discussed in Section IV of this notice.

D. Prior Interpretations and Applications of the Title V Provisions

This section includes a discussion of certain aspects of the statutory elements of CAA section 505(b)(2) as well as the implementing regulations that have previously been interpreted by the EPA and/or courts. The discussion that follows serves to inform the public, stakeholders, permitting authorities, and other interested parties of these interpretations. Although the matters discussed in this section are available to the public,[8] and in some cases have been available for years and/or already subject to judicial review, in the interest of transparency and clarity, the agency is collecting these interpretations and judicial decisions in this notice. That information is repeated here merely as a convenience for the public. The agency is not in this notice proposing to change these previously-presented interpretations, soliciting comments on these interpretations, or reopening the already-issued title V orders or other EPA documents in which these interpretations were discussed. None of the regulatory revisions proposed in this notice would alter these interpretations or the prior title V orders or other EPA documents in which these interpretations were discussed.

1. "Threshold" Requirements

Certain of the requirements under CAA section 505(b)(2) related to petitions are sometimes referred to as "threshold" requirements, which provide some procedural requirements and some limitations on the scope of title V petitions. These include, for example, that the petition be filed within 60 days following the agency's 45-day review period. Another example is the requirement that the petition be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting agency. The agency has previously addressed these "threshold" issues in prior title V orders, and some of those statements are reiterated in this section.

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[8] The Title V Petitions Database contains petitions and EPA Orders responding to petitions and is available at: *https://www.epa.gov/title-v-operating-permits/title-v-petition-database.*

a. Timeliness

Generally speaking, the first step in the petition response process is for the agency to ascertain if the petition was timely filed pursuant to CAA section 505(b)(2). The Act and implementing regulations at 40 CFR 70.8(d) provide for a 60-day window in which to file a title V petition, which runs from the expiration of the EPA's 45-day review period. A petition received after the 60-day petition deadline is not timely. The agency is aware that because the petition period runs from the end of the EPA's 45-day review period, and the date a proposed permit is received by the EPA is not always apparent, the petition deadline is not always readily apparent. The agency currently encourages permitting authorities to provide notifications to the public or interested stakeholders regarding the timing of proposal of permits to the EPA, for example making that information available either online, such as Region 4 has done on the EPA Web site, "Region 4 Proposed Title V Permits and State Contacts," [9] or in the publication in which public notice of the draft permit was given.

b. Reasonable Specificity

The second "threshold" requirement described in the statute regards the content of a petition. CAA section 505(b)(2) requires that, unless one of the enumerated exceptions applies, the petition must be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting agency. Subject to the exceptions contained in the provision, the EPA understands this statutory language to require that the issues presented in a petition be raised during the public comment process with reasonable specificity. Such issues could, however, be raised in comments filed by a commenter other than the petitioner.

The EPA continues to believe that, as stated in the preamble to the 1991 part 70 proposal, Congress did not intend for petitioners to create an entirely new record before the EPA that the permitting authority had no opportunity to address. The requirement to raise issues "with reasonable specificity" places the burden on the petitioner. Unless there are unusual circumstances, the Petitioner needs to provide evidence that would support a finding of noncompliance with the Act to the permitting authority before it is raised in a petition. *See,* 56 FR 21712, 21750 (1991).

Where an issue is raised to the EPA in a title V petition without first raising it with reasonable specificity to the permitting authority to give it the opportunity to address the issue, the Administrator has generally denied such claims consistent with the statutory requirements. The EPA has specifically addressed the reasonable specificity threshold requirement in a number of title V petition orders. Some key highlights are summarized next.

In 2013 in the *Luminant Order,* the EPA responded to a petition that raised a number of issues, including several that were raised only in general terms or not raised at all during the public comment period by any commenter. *See, In the Matter of Luminant Generating Station, Petition,* Order on Petition No. VI–2011–05 (January 15, 2013). For example, the petitioners claimed that the permit in question failed to identify emission units that were associated with permit by rules to which the facility was subject. The EPA noted that no mention was made in the public comments concerning the lack of identification of emission units, and denied the claim. *Id.* at 12. The Administrator similarly denied other claims not raised with reasonable specificity during the public comment period: The comments did not present evidence or analysis to support these petition claims, and thus the state had no opportunity to consider and respond to those claims. *Id.* at 6, 11, 13, 15. The *Luminant Order* also included a discussion of the reasonable specificity standard, that absent unusual circumstances, the requirement to raise issues "with reasonable specificity" places the burden on the petitioner to bring forward evidence before the State that would support a finding of noncompliance with the CAA. *See id.* at 5.

As noted above, the Act contains two enumerated exceptions to the "reasonable specificity" requirement. Namely, issues that were not raised with reasonable specificity during the public comment period can be raised in a petition if the petitioner demonstrates that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period. CAA section 505(b)(2). For an issue to fit within one of these exceptions, the petitioner would have to demonstrate the impracticality, or show that the grounds arose after the comment period. The EPA has also addressed this issue in petition orders.

One example is in the 2012 *San Juan Generating Station Order,* where the EPA responded to a petition claim that the permit failed to assure compliance with PSD applicable requirements because it did not address significant increase of a specific pollutant after a change at the facility. *See In the Matter of Public Service Company Of New Mexico, San Juan Generating Station (SJGS),* Order on Petition VI–2010 (February 15, 2012) at 10. According to the petitioners, these concerns were not raised during the comment period because the State did not make the information about the significant emission increase available until after the public comment period, when the permitting authority noted in its response to the EPA that the change triggered PSD and expressed its intent to add a title V compliance schedule to the permit. The Administrator found that in this case, the petitioners demonstrated that the grounds arose after the comment period and therefore, the EPA would consider their claim on this matter. *See id.* at 10.

c. Scope of Permit Action

Petitions may be submitted on several types of proposed title V permits, such as proposed initial permits, permit renewals, or permit revisions, which may include minor or significant modifications to the title V permit. Some stakeholders have indicated there may be confusion on the matter of petition opportunities, particularly for minor modification actions. In cases where the permitting authority has not provided for a prior public comment period on a minor permit modification, petitioners can still submit a petition to the Administrator. 57 FR 32283; *see also* 40 CFR 70.7(e)(2)(iv) (for a minor modification, the permitting authority may not issue a final permit until after EPA's 45-day review period or until EPA has notified the permitting authority that it will not object, whichever is earlier) and 70.8(e) (a part 70 permit, including a modification, may not be issued until after EPA has had an opportunity to review the proposed permit as required under this section). As the EPA may receive a petition on different types of proposed title V permits, it is important for the agency to be able to identify the particular action of concern to the petitioner.

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[9] EPA Region 4's Web site provides links with lists of permits that have been proposed and are still under the public petition deadline, organized by state: *https://www.epa.gov/caa-permitting/region-4-proposed-title-v-permits-and-state-contacts.*

Under CAA section 505(b)(2), a petition pertains to a particular permit. Thus, the EPA must be able to discern from the petition what permit action the petition is based on in order to review and respond to it. The EPA has interpreted the potential scope of the petition as related to the scope of the permit action that is the basis of the petition. In the 1992 preamble to the final part 70 rule, the EPA explained that public objections to an initial permit, permit revision, or permit renewal must be germane to the applicable requirements implicated by the permitting action in question. For example, objections raised on a portion of an existing permit that would not in any way be affected by a proposed permit revision would not be germane. 57 FR 32250, 32290/3 (July 21, 1992). Consistent with CAA section 505(b)(2), the EPA has considered the scope of the permit proceeding in reviewing petitions and denied petitions that concern issues that are outside the scope of the permit proceeding. *See, e.g., In the Matter of Wisconsin Public Service Corporation's JP Pulliam Power Plant* (Order in response to Petition Number V–2012–01) (January 7, 2013) at 8; *In the Matter of Consolidated Environmental Management, Inc.—Nucor Steel Louisiana,* Order on Petition Numbers VI–2010–05, VI–2011–06 and VI–2012–07 (January 30, 2014) (*Nucor III Order*) at 12.

One such denial can be found in the 2007 *Weston Order,* in which the EPA received a petition that claimed that the proposed modification permit was deficient because it did not incorporate limits from PSD and preconstruction permit applications for a particular unit at the Weston facility. *See, In the Matter of Wisconsin Public Service Corporation—Weston Generating Station* (Order in response to Petition) (December 19, 2007). The EPA denied the claim because the unit in question had not been affected by or related to the significant modification on which the title V permitting action was based. The Order stated:

> EPA interprets its title V regulations at 40 CFR part 70 to require different opportunities for citizens to petition on initial permit issuance, permit modifications, and renewals. The regulations state that a permit, permit modification, or renewal may be issued if specified conditions are met, 40 CFR 70.7(a)(1), including a requirement that '[t]he permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions.' 40 CFR 70(a)(1)(ii) and 70.7(a)(5) (emphasis added). Further, 40 CFR 70.7(h), in requiring the permitting authority to provide adequate procedures for public notice and comment for permit proceedings that qualify as significant modifications, provides that the notice shall identify 'the activity or activities involved in the permit action; the emissions change involved in any permit modification; . . . and all other materials available to the permitting authority that are relevant to the permit decision . . .' 40 CFR 70.7(h)(2) (emphasis added). We interpret these provisions to limit petitions on significant modifications to issues directly related to those modifications. *Id.* at 5.

The *Weston Order* further noted that this limitation on petitions for title V significant modifications did not affect the public's ability to participate in the permit issuance or enforcement processes. When a title V permit is renewed, all aspects of the title V permit are subject to public comment and petition as part of the process to issue a renewal permit. Generally speaking, members of the public can also bring an enforcement action in situations of alleged noncompliance with any permit terms. Furthermore, if the public is concerned that the permit fails to incorporate all applicable requirements, a petition may be submitted to the Administrator to reopen the permit for cause under CAA section 505(e). *Id.* at 7.

2. Demonstration Requirement

In addition to the threshold requirements, the statute identifies another general guideline for the EPA's consideration. Specifically, to compel an objection by the EPA, CAA section 505(b)(2) requires the petitioner to demonstrate that a permit is not in compliance with requirements of the Act, including the requirements of the applicable implementation plan. The EPA has interpreted the demonstration burden under CAA section 505(b)(2) in numerous title V petition orders and court opinions have also interpreted it. What follows is a brief restatement of interpretations previously articulated in some of those orders and opinions.

In the 2013 *Nucor II Order* the EPA stated:

> The petitioner demonstration burden is a critical component of CAA section 505(b)(2). As courts have recognized, CAA section 505(b)(2) contains a "discretionary component" that requires the exercise of the EPA's judgment to determine whether a petition demonstrates noncompliance with the Act, as well as a nondiscretionary duty to object where such a demonstration is made. *Sierra Club* v. *Johnson,* 541 F.3d at 1265–66 ("it is undeniable [CAA section 505(b)(2)] also contains a discretionary component: it requires the Administrator to make a judgment of whether a petition demonstrates a permit does not comply with clean air requirements"); *NYPIRG,* 321 F.3d at 333. Courts have also made clear that the Administrator is only obligated to grant a petition to object under CAA section 505(b)(2) if the Administrator determines that the petitioners have demonstrated that the permit is not in compliance with requirements of the Act. *See, e.g., Citizens Against Ruining the Environment,* 535 F.3d at 667 (section 505(b)(2) "clearly obligates the Administrator to (1) determine whether the petition demonstrates noncompliance and (2) object *if* such a demonstration is made") (emphasis added); *NYPIRG,* 321 F.3d at 334 ("Section 505(b)[2] of the CAA provides a step-by-step procedure by which objections to draft permits may be raised and directs the EPA to grant or deny them, *depending on* whether non-compliance has been demonstrated.") (emphasis added); *Sierra Club* v. *Johnson,* 541 F.3d at 1265 ("Congress's use of the word 'shall' . . . plainly mandates an objection *whenever* a petitioner demonstrates noncompliance") (emphasis added). Courts reviewing the EPA's interpretation of the ambiguous term "demonstrates" and its determination as to whether the demonstration has been made have applied a deferential standard of review. *See, e.g., Sierra Club* v. *Johnson,* 541 F.3d at 1265–66; *Citizens Against Ruining the Environment,* 535 F.3d at 678; *MacClarence* [v. *EPA*], 596 F.3d [1123] at 1130–31 [9th Cir. 2010)].

See, In the Matter of Consolidated Environmental Management, Inc.—Nucor Steel Louisiana, Order on Petition Numbers VI–2011–06 and VI–2012–07 (June 19, 2013) (*Nucor II Order*) at 4–5.

The EPA highlighted in the *Nucor II Order* several reasons why the petitioner's demonstration is important in the context of a title V petition, including first, the relatively short time frames title V of the CAA provides for the EPA to review title V permits and petitions. As previously explained, under CAA section 505(b)(1), the Administrator has only 45 days after receiving a copy of the proposed permit to review that permit and object if she determines that the permit is not in compliance with the CAA. If the Administrator does not object, then any petition for an objection must be filed within 60 days after the expiration of the 45-day review period, and the agency is required to grant or deny that petition within 60 days. *See* CAA section 505(b)(2). Given these short time frames, the *Nucor II Order* explained that EPA does not believe it is reasonable to conclude that Congress would have intended for the EPA to engage in extensive fact-finding or investigation to analyze contested petition claims, and in support of this interpretation it cited *Citizens Against Ruining the Environment,* 535 F.3d at 678, which noted that because the limited time frame Congress gave the EPA for permit review "may not allow the EPA to fully investigate and analyze contested allegations, it is reasonable in this context for the EPA to refrain from extensive fact-finding." *Nucor II Order* at 5. Therefore, it is imperative that the petitioner make the demonstration.

After discussing the relatively short time frames for the EPA to review as the first point, the *Nucor II Order* continued:

> Second, the Act is structured so that the EPA's evaluation of a petition under CAA section 505(b)(2) follows and is distinct from its review of a proposed permit under section 505(b)(1), which requires the Administrator to object on his own accord if he determines the permit is not in compliance with the Act. By contrast, under section 505(b)(2), the Administrator is compelled to object only if the necessary demonstration has been made.[10]
>
> Third, the EPA is also sensitive to the fact that its response to title V petitions often comes late in the title V permitting process and often after the title V permit has been issued. *See* CAA section 505(b)(3) (acknowledging that the EPA's response to a petition may occur after the permit has been issued). The EPA's evaluation of the petitioners' demonstration can have consequences, as a determination by the EPA that the petition demonstrates the permit is not in compliance with the Act requires the Administrator and the state permitting authority to take certain actions. *MacClarence,* 596 F.3d at 1131. The EPA also acknowledges Congress' direction that permitting authorities must provide "streamlined" procedures for issuing title V permits, indicating that the title V permitting process should proceed efficiently and expeditiously. CAA section 502(b)(6); 40 CFR part 70.4(d)(3)(ix). These circumstances make it all the more important that the EPA carefully evaluate the petition's demonstration and not issue an objection under section 505(b)(2) unless the petition demonstrates that one is required.
>
> Fourth, and consistent with its importance in CAA section 505(b)(2), the petitioner demonstration requirement helps to ensure the equity, procedural certainty, efficiency, and viability of the title V petition process for petitioners, state and local permitting authorities, the EPA and source owner/operators. This petitioner demonstration requirement helps to ensure that each and every petitioner is treated equitably in the petition process because the same standard for demonstration applies to each petitioner. Where petitioners meet their burden, the EPA will grant the petition. Where they do not, the EPA will not grant the petition. In this way, the EPA gives equal consideration to the petitioner's arguments, as appropriate.
>
> In addition, the petitioner burden requirement also helps to ensure that the title V petition process is consistent with the division of responsibilities and co-regulator relationship between the EPA and state or local permitting authorities established in the CAA. When carrying out our title V review responsibilities under the CAA, it is our practice, consistent with that relationship, to defer to permitting decisions of state and local agencies with approved title V programs where such decisions are not inconsistent with the requirements under the CAA. The EPA does not seek to substitute its judgment for the state or local agency. As we discuss above in this section, sections 505(b)(1) and (2) of the Act, require the EPA to object to the issuance of a title V permit if it determines that the title V permit contains provisions that are not in compliance with applicable requirements of the Act, including the requirements of the applicable SIP. State and local agencies must ensure that the title V permit includes all applicable requirements under the CAA for that source, and provide an adequate rationale for the permit requirements in the public record, including the response to comment. When the EPA grants a particular title V petition under CAA section 505(b)(2), the EPA directs the state or local agency regarding actions necessary to ensure that the title V permit meets the applicable requirements with regard to the particular issue(s) that was raised, including appropriate and necessary changes to the permit.
>
> The petitioner burden requirement assures that petitioners have clearly and sufficiently articulated the basis for an objection before a title V petition is granted. Thus, state and local agencies have certainty regarding the standard against which petitions on their title V permits and permit records will be assessed. The petitioner burden requirement also helps to ensure that the EPA does not have to spend significant time and resources responding to ungrounded claims regarding the title V permit or permit record. For example, petitioners might include claims in petitions unrelated to applicable requirements for the title V permit at issue or that do not provide sufficient information for the EPA to analyze the claim. Without the petitioner demonstration burden, the EPA could be required to investigate and respond to claims that ultimately prove to be ungrounded or frivolous. This would increase the complexity and uncertainty of the title V permit process, and would be burdensome and unproductive for the EPA, as well as for state and local agencies. The petitioner burden standard also helps to ensure certainty of the permitting process for source owner/operators, because it provides a consistent standard against which petitions on their title V permits will be assessed.

Nucor II Order at 5–7.

In light of the EPA's interpretation of the demonstration requirement and its importance to the implementation of the statutory structure that Congress created for addressing objections to title V permits, the EPA has discussed and applied its interpretation of the demonstration burden in numerous title V orders. Examples of the EPA's application of this standard can be found in: *In the Matter of Scherer Steam-Electric Generating Plant Juliette, Georgia, et al.,* Order on Petition Nos. IV–2012–1, IV–2012–2, IV–2012–3, IV–2012–4, and IV–2012–5 (Apr. 14, 2014) at 12–13; *In the Matter of Hu Honua Bioenergy Facility,* Order on Petition No. IX–2001–1 (July 2, 2014) (*Hu Honua Order*) at 25–27; *In the Matter of EME Homer City Generation LP, et al.,* Order on Petition No. III–2012–06, III–2012–07, and III–2013–02 (July 30, 2014) at 24–25; *In the Matter of Public Service of New Hampshire Schiller Station,* Order on Petition No. VI–2014–04 (July 28, 2015) at 11–12.

The interpretation quoted from the *Nucor II Order* is based on the discussion of the demonstration burden in opinions from federal courts of appeal. These courts have recognized that the term "demonstrates" in CAA section 505(b)(2) is ambiguous and have accordingly deferred to the EPA's interpretation. *See Wildearth Guardians* v. *EPA,* 728 F.3d 1075, 1081–1082 (10th Cir. 2013); *MacClarence* v. *EPA,* 596 F.3d 1123, 1130–1131 (9th Cir. 2010); *Sierra Club* v. *Johnson,* 541 F.3d 1257, 1265–1267 (11th Cir. 2008); *Citizens Against Ruining the Env't* v. *EPA,* 535 F.3d 670, 677–678 (7th Cir. 2008). In so deferring, these courts have discussed the seminal Supreme Court decision, *Chevron USA, Inc.* v. *Natural Res. Def. Council Inc.,* 467 U.S. 837, 842–843 (1984), which provides guiding principles for judicial review of agency interpretations and determinations under statutes that the agency administers.[11] *Chevron* establishes a well-known two-step test: First, if the Congress has "directly spoken to the precise question at issue" both the court and the agency must "give effect to the unambiguously expressed intent of Congress." *Chevron,* 467 U.S. at 842–843. Second, if the statute is ambiguous, courts will generally defer to the agency's interpretation and uphold it so long as it "is based on a permissible construction of the statute." *Id.* at 843.

Several federal courts of appeal have agreed with the EPA's position that the term "demonstrates" in CAA section 505(b)(2) is ambiguous. *MacClarence,* 596 F.3d at 1130 (collecting cases). As one opinion pointed out, "[n]either the Clean Air Act nor its regulations define the term 'demonstrates' or give context to how the Administrator should make this judgment." *Sierra Club* v. *Johnson,* 541 F.3d at 1266; *see also Citizens Against Ruining the Env't,* 535 F.3d at

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[10] Footnote 3 of the *Nucor II Order* explained: "Further, CAA section 505(b)(2) provides that 'the Administrator may not delegate the requirements of this paragraph.' This reflects the significance Congress attached to the decision on whether or not to object in response to a petition, and means the process requires additional time."

[11] The principle of deference named after this decision—*Chevron* deference—is discussed in more detail in Section IV.A of this notice.

677–678. After considering the plain meaning of the term "demonstrates" as shown by various dictionary definitions, courts have agreed that the plain meaning "does not resolve important questions that are part and parcel of the Administrator's duty to evaluate the sufficiency of a petition, for example, the type of evidence a petitioner may present and the burden of proof guiding the Administrator's evaluation of when a sufficient demonstration has occurred." *Sierra Club* v. *Johnson*, 541 F.3d at 1266; *MacClarence*, 596 F.3d at 1131 (same). Similarly, another court observed that the Act "does not set forth any factors the EPA must take into account in determining whether a petitioner has demonstrated noncompliance under [CAA 505(b)(2)]." *Wildearth Guardians*, 728 F.3d at 1082.

This recognition of the ambiguity in CAA section 505(b)(2) leads to the conclusion that "the statute's silence on these important issues means Congress has delegated to the EPA some discretion in determining whether, in its expert opinion, a petitioner has presented sufficient evidence to prove a permit violates clean air requirements." *Sierra Club* v. *Johnson*, 541 F.3d at 1266. Accordingly, as one opinion put it, "the EPA has discretion under the statute to determine what a petition must show in order to make an adequate 'demonstration.'" *Citizens Against Ruining the Env't*, 535 F.3d at 678. Similarly, another court explained, "because we conclude [section 505(b)(2)] is ambiguous when it comes to defining the type of demonstration required to trigger the Administrator's duty to object, we are willing to defer to a reasonable interpretation by the agency as to when a petitioner has sufficiently demonstrated noncompliance with PSD requirements." *Sierra Club* v. *Johnson*, 541 F.3d at 1267. In so deferring to the EPA's interpretation of the demonstration standard under CAA section 505(b)(2) some courts have noted that they need not resolve the question of the exact degree of deference to be accorded to the EPA because its "interpretation is persuasive even under [the] less deferential standard of review" under *Skidmore* v. *Swift*, 323 U.S. 134 (1944) and "would thus prevail under either standard." *Wildearth Guardians*, 728 F.3d at 1082; *MacClarence*, 596 F.3d at 1131 (same).

In the context of reviewing particular applications of the demonstration burden in title V petition orders, courts have also deferred to the agency's interpretation as to whether or not a petition had adequately demonstrated that an objection was warranted. For example, in *MacClarence*, the petition was denied in part because it "failed to provide adequate information to support [a claim]" and made "only generalized statements . . . and did not provide adequate references, legal analysis, or evidence in support of these general assertions." 596 F.3d at 1131 (internal marks omitted). The court found the EPA's construction of the burden under CAA section 505(b)(2) as encompassing an expectation that a petition provide "references, legal analysis, or evidence" a reasonable interpretation, which comported with both the plain meaning of the term "demonstrates" and with CAA section 505(b)(2). *Id.* In addition, in *MacClarence*, the petitioner argued that the EPA should not have denied his petition for failing to address the permitting authority's reasoning in the final permitting decision and documents, which differed from the draft documents and explained why the changes had been made. The court upheld the EPA's decision, determining that it was reasonable for the EPA to expect the petitioner to address the permitting authority's final decision. *Id.* at 1132–33. As another example of the deference that courts have accorded the EPA's application of the demonstration standard, in the *Wildearth Guardians* case cited above, the court found reasonable the EPA's determination that the petitioner could not rely solely on the fact that a Notice of Violation (NOV) had been previously issued to demonstrate noncompliance. *Wildearth Guardians*, 728 F.3d at 1082. The court noted that the EPA had explained that an NOV may be a relevant factor in "'determining whether the overall information presented by Petitioner—in light of all the factors that may be relevant—demonstrates the applicability of a requirement for the purposes of title V'" but explained that other factors may also be relevant. *Id.* The EPA further explained that if the petitioner had not addressed other relevant factors, it could find that petitioner "'failed to present sufficient information to demonstrate that the requirement is applicable.'" *Id.* Finding this interpretation of the demonstration requirement persuasive, the court deferred to it. *Id.*

3. Raising PSD Issues in a Petition

As noted earlier, many petitions raise numerous and highly complex issues around PSD permitting, a separate permitting program under the CAA. Because of the frequency with which title V petitions raise PSD claims, statements in prior petition orders regarding such claims is worth a separate mention here. In the *Meraux Refinery Order, In the Matter of Meraux Refinery*, Order on Petition Number VI–2012–04 (May 29, 2015), at 3–4, the EPA stated:

> Where a petitioner's request that the Administrator object to the issuance of a title V permit is based in whole, or in part, on a permitting authority's alleged failure to comply with the requirements of its approved PSD program (as with other allegations of noncompliance with the Act), the burden is on the petitioner to demonstrate to the Administrator that the permitting decision was not in compliance with the requirements of the Act, including the requirements of the SIP. CAA section 505(b)(2). . . . Such requirements, as the EPA has explained in describing its authority to oversee the implementation of the PSD program in states with approved programs, include the permitting authority: (1) following the required procedures in the SIP; (2) making PSD determinations on reasonable grounds properly supported on the record; and (3) describing the determinations in enforceable terms. *See, e.g., In the Matter of Wisconsin Power and Light, Columbia Generating Station*, Order on Petition No. V–2008–01 (October 8, 2009) at 8. The permitting authority for a State's SIP-approved PSD program has substantial discretion in issuing PSD permits. Given this discretion, in reviewing a PSD permitting decision, the EPA will not substitute its own judgment for that of the State. Rather, consistent with the decision in *Alaska Dep't of Envt'l Conservation* v. *EPA*, 540 U.S. 461 (2004), in reviewing a petition to object to a title V permit raising concerns regarding a state's PSD permitting decision, the EPA generally will look to see whether the petitioner has shown that the state did not comply with its SIP-approved regulations governing PSD permitting or whether the state's exercise of discretion under such regulations was unreasonable or arbitrary. *See, e.g., In re Louisville Gas and Electric Company*, Order on Petition No. IV–2008–3 (Aug. 12, 2009); *In re East Kentucky Power Cooperative, Inc. Hugh L. Spurlock Generating Station*, Order on Petition No. IV–2006–4 (Aug. 30, 2007); *In re Pacific Coast Building Products, Inc.* (Order on Petition) (Dec. 10, 1999); *In re Roosevelt Regional Landfill Regional Disposal Company* (Order on Petition) (May 4, 1999).

As is indicated by the internal citations to a number of other title V orders in the *Meraux Refinery Order*, the agency has made similar statements in several previous orders over the years.

4. Raising Emissions Monitoring Issues in a Petition

Many petitions also raise issues surrounding emissions monitoring, recordkeeping and reporting in title V permits. Title V of the CAA requires permits to contain adequate emissions monitoring, recordkeeping, and reporting to assure sources' compliance with applicable requirements. 57 FR 32250, 32251 (July 1, 1992). Because of the frequency with which monitoring claims are raised, statements in prior petition orders regarding such claims are also worth a separate mention here. As an example, *In the Matter of the Premcor Refining Group, Inc.*, Order on Petition Number VI–2007–02 (May 28, 2009), at 7, the EPA stated:

> As a general matter, permitting authorities must take three steps to satisfy the monitoring requirements in the EPA's part 70 regulations. First, a permitting authority must ensure that monitoring requirements contained in applicable requirements are properly incorporated into the title V permit. 40 CFR 70.6(a)(3)(i)(A). Second, if the applicable requirements contain no periodic monitoring, permitting authorities must add monitoring "sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit." 40 CFR 70.6(a)(3)(i)(B). Third, if the applicable requirement has associated periodic monitoring but the monitoring is not sufficient to assure compliance with permit terms and conditions, a permitting authority must supplement monitoring to assure compliance. *See* 40 CFR 70.6(c)(1).

5. Addressing Permitting Authority's Rationale

The EPA has previously noted that as part of the CAA section 505(b)(2) demonstration requirement, the petitioner is expected to address the permitting authority's final decision, and the permitting authority's final reasoning (including the RTC), where these documents were available during the timeframe for filing the petition. Where a permitting authority has articulated its rationale for the permit terms and conditions concerning an applicable requirement in its record (RTC and statement of basis) and the petitioner did not adequately address that rationale in its petition, the EPA has often denied the petition, at least in part, on that basis. *See e.g., In the Matter of Noranda Alumina, LLC,* Order on Petition No. VI–2011–04 (December 14, 2012) at 20–21 (denying title V petition issue where petitioners did not respond to state's explanation in response to comments or explain why the state erred or the permit was deficient); *In the Matter of Kentucky Syngas, LLC,* Order on Petition No. IV–2010–9 (June 22, 2012) at 41 (denying title V petition issue where petitioners did not acknowledge or reply to state's response to comments or provide a particularized rationale for why the state erred or the permit was deficient). Caselaw supports this interpretation. *See MacClarence,* 596 F.3d at 1132–33 (the Administrator "reasonably expected" the petitioner to challenge the state permitting authority's explanation and reasoning for final permit).

IV. Proposed Revisions to Title V Regulations

This notice proposes several changes to part 70. Many of the proposed revisions fall within three key areas. First, regulatory language is proposed that encourages the use of the agency's electronic submittal system for title V petitions. Alternative methods for submittal are also identified in this notice. Petitioners who experience technical difficulty when attempting to submit a petition through the electronic submittal system may send it to the designated email address, while those without access to the Internet or unable to access email for other reasons may send a paper copy to the specific physical address identified in this proposal.

Second, this rule proposes mandatory petition content requirements and standard formatting for title V petitions. The EPA has identified key pieces of information that are critical when assessing claims and potential flaws in a title V permit or permit process, and these pieces are now proposed as required content for petitions and would be a new provision, 40 CFR 70.12. Under the proposed revisions, in order to demonstrate a flaw in the permit, permit record, or permit process that warrants an objection under CAA section 505(b)(2), the petition would present the required content in the same manner and order as contained in the new section of the title V regulations, 40 CFR 70.12.

A related change is proposed that would add new regulatory language to 40 CFR 70.8, which would require a petitioner to send a copy of the petition to both the permitting authority and the permit applicant. The current title V regulations do not have provisions effectuating this requirement of section 505(b)(2) of the Act. Therefore, this proposal would insert a requirement into the regulation identical to the one in the Act in order to ensure consistency with this provision of the statute.

Third, the agency proposes to require that permitting authorities respond in writing to significant comments received during the public comment period on a draft title V permit. Further, the EPA proposes regulatory language stating that this response to significant comments, often referred to as the RTC, must be sent with the proposed permit and statement of basis for the 45-day EPA review period of the proposed permit.[12] Under the proposed revisions, the EPA 45-day review period would not commence until the proposed permit and all necessary supporting information, including the written RTC, are received. Finally, the EPA proposes to require that within 30 days of sending the proposed permit to the EPA, that permitting authorities must provide notification that the proposed permit and the response to significant public comments are available to the public. Such notice must explain how these materials may be accessed.

These proposed revisions to part 70 provide increased transparency and clarity to the title V petition preparation, submittal, review, and response processes. Improved interactions with stakeholders that participate in the title V process and more accurate tracking of petitions may also result from the establishment of the preferred petition submittal method. If finalized, the proposed rule revisions would help facilitate a more effective process for the development of title V petitions and a more efficient process for the review and response to title V petitions. Overall, the EPA is intending that these rule revisions along with other shared information will help to improve title V permits issued by permitting authorities, promote access to and provide better understanding of the title V petition process for potential petitioners, and reduce delays in decisions and support the agency's efforts to meet its obligations in responding to title V petitions.

For each of the three key areas, the agency describes the proposed regulatory changes, rationale for proposing the changes, and request for comment in the sections that follow. Before discussing each of the three key areas of this proposal, however, this notice provides some additional legal background related to these proposals.

A. Additional Legal Background for the Proposed Revisions to the Part 70 Rules

To provide context for the statutory and regulatory interpretations discussed below, the EPA first discusses some additional legal background, including principles generally applied by courts in reviewing agency interpretations.

The Supreme Court decision, *Chevron USA, Inc.* v. *Natural Res. Def. Council*

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[12] The statement of basis is a statement that "sets forth the legal and factual basis . . . (including references to the applicable statutory or regulatory provisions)" for terms and/or conditions in a permit. 40 CFR 70.7(a)(5). Often a separate document, the statement of basis is intended to provide information to facilitate the EPA's review of permit terms and conditions and also to provide information that supports public participation in the permitting process.

Inc., 467 U.S. 837, 842–843 (1984), establishes principles that guide judicial review of agency interpretations of statutes that the agency administers. Under *Chevron* courts apply a well-known two-step test: First, if the Congress has "directly spoken to the precise question at issue" both the court and the agency must "give effect to the unambiguously expressed intent of Congress." *Chevron*, 467 U.S. at 842–843. Second, if the statute is ambiguous, courts will generally defer to the agency's interpretation and uphold it so long as it "is based on a permissible construction of the statute." *Id.* at 843. At the second step of this inquiry, also referred to as "*Chevron* Step 2," courts such as the D.C. Circuit have frequently explained that " '*Chevron* requires that we defer to the agency's reasonable interpretation of the term.' " *Miss. Comm'n on Envtl. Quality* v. *EPA*, 790 F.3d 138, 151 (D.C. Cir. 2015) (*quoting Pennsylvania Dept. of Envtl. Protection* v. *EPA*, 429 F.3d 1125, 1130 (D.C. Cir. 2005)). In other words, under *Chevron* the agency's interpretation " 'governs if it is a reasonable interpretation of the statute—not necessarily the only possible interpretation, nor even the interpretation deemed most reasonable by the courts.' " *Entergy Corp.* v. *Riverkeeper, Inc.*, 556 U.S. 208, 218 (2009) (*quoted in Airlines for Am.* v. *Transp. Sec. Admin.*, 780 F.3d 409, 413 (D.C. Cir. 2015)).

Similarly, courts accord deference to an administrative agency's interpretations of its own regulations under principles enunciated in *Auer* v. *Robbins*, 519 U.S. 452, 462–63 (1997). This type of deference is frequently referred to as *Auer* deference. When an agency's interpretation of a regulation receives *Auer* deference, the court accepts the agency's interpretation "unless the interpretation is plainly erroneous or inconsistent with the regulations or there is any other reason to suspect that the interpretation does not reflect the agency's fair and considered judgment on the matter in question." *Rural Cellular Ass'n & Universal Serv.* v. *FCC*, 685 F.3d 1083, 1093–1094 (D.C. Cir. 2012) (internal marks and citations omitted).

Finally, the EPA notes that administrative agencies have broad discretion to adopt procedures to discharge their obligations under the statutes they implement. In the words of the U.S. Supreme Court: "[T]he formulation of procedures [is] basically to be left within the discretion of the agencies to which Congress [has] confided the responsibility for substantive judgments." *Vermont Yankee Nuclear Power Corp.* v. *Natural Resources Defense Council*, 435 U.S. 519, 524 (1978). Later in the same case, the Court observed that "[a]bsent constitutional constraints or extremely compelling circumstances the administrative agencies should be free to fashion their own rules of procedure to pursue methods of inquiry capable of permitting them to discharge their multitudinous duties." *Id.* at 543–544. Relatedly, courts have emphasized the inherent authority that administrative agencies have "to control the disposition of their caseload" and manage their own dockets. *See, e.g., GTE Service Corp.* v. *FCC*, 782 F.2d 263, 273–274 (D.C. Cir. 1986).

B. Electronic Submittal System for Petitions

1. Proposed Revisions

a. Petition Submission to the EPA

In this notice, the EPA is proposing to revise part 70 to add a new provision that would require petitions to be submitted using one of three identified methods. Among those three methods, the agency encourages petitioners to submit title V petitions through the electronic submittal system, the agency's preferred method. The EPA has developed a title V petitions submittal system through the Central Data Exchange (CDX) and information on how to access and use the system is available at the title V petitions Web site: *http://www.epa.gov/title-v-operating-permits/title-v-petitions.* While the current submittal system was designed using CDX, the EPA recognizes that adjustments to the system or a different submittal system entirely may be needed in the future. Therefore, the title V petitions Web site will provide access to the designated electronic submittal system in use at any given time, which will remain the primary and preferred method for receiving title V petitions. The electronic submittal system allows for a direct route to the appropriate agency staff. It also provides immediate confirmation that the EPA has received the petition and any attachments.

If a petitioner experiences technical difficulties when trying to submit a petition through the electronic submittal system identified on the title V petitions Web site, the petition may also be submitted to the agency through the following email address: *titleVpetitions@epa.gov.* This address is being established as an alternative method for use in instances when the electronic submittal system is not available. For petitioners without access to the Internet at the time of petition submittal, this notice also announces the establishment of one specific physical address to which all paper copies of petitions should be sent. Paper copies of all petitions unable to be sent electronically may be sent by mail or by courier to the following address: U.S. EPA, Office of Air Quality Planning and Standards, Air Quality Policy Division, Operating Permits Group Leader, 109 T.W. Alexander Dr. (C504–05), Research Triangle Park, NC 27711. Additional information on these alternative methods for submittal will also be available at the title V petitions Web site.

Although regulatory changes are being proposed to integrate these methods of submission into the part 70 rules, all three of these methods are currently available for petition submission, and petitioners may elect to use any one of them now. Furthermore, although the proposed changes to the regulatory provisions identify three possible means to submit petitions, for any particular petition, once a petition and any attachments have been successfully submitted using one method, there is no need to submit a duplicate copy via another method. The EPA requests that petitioners only submit a petition using one method, which will expedite the administrative process and improve the EPA's efficiency in reviewing petitions. Finally, if these regulatory revisions are finalized, the agency would not be obligated to consider petitions submitted through any means other than the three identified in the rule.

b. Required Copy of the Petition to the Permitting Authority and Applicant

Section 505(b)(2) of the Act requires that the petitioner provide copies of its petition to the permitting authority and the permit applicant. This requirement does not currently appear in the part 70 rules. The EPA is proposing to revise the part 70 regulations in order to fill this gap in the regulations. Specifically, in this notice, the EPA proposes to add language to 40 CFR 70.8(d) that is identical to the statutory language.

2. Why is the EPA proposing this change?

In general, feedback from stakeholders, as well as the EPA's experience in receiving petitions, indicate there is confusion at present as to where a petition should be submitted. While section 505(b)(2) of the CAA and 40 CFR 70.8(d) provide that any person may petition the Administrator to object within 60 days after the expiration of the EPA's 45-day review period for the proposed permit, both the statute and the regulations are currently silent as to how a petition should be submitted to the EPA. Because the regulations do not dictate a specific address, title V petitions have been received in a number of different offices within the agency. Most of the recent petitions have been sent to the agency through email, in some cases with a duplicate paper copy sent to a physical address somewhere within the EPA. For example, the agency has received petitions that were sent directly to a staff person in a Regional office, as well as petitions sent directly to the Administrator, either by email or courier. One complication presented by this current practice is that by sending petitions via email, attachments supplied by petitioners as supporting materials may become separated from the petition or lost entirely. In addition, and potentially because of this fact, petition attachments are frequently submitted by mail or courier, while the petition itself is submitted by email. These various submission practices require additional administrative processing within the EPA and can delay the initiation of the substantive petition review process.

One goal of this proposal is to clarify where and how title V petitions should be submitted. Another goal of this proposal is to announce the establishment of an electronic submittal system and promote its use as the preferred method for the submittal of petitions to the EPA. These proposed changes are expected to allow for more accurate tracking of petitions and to increase the agency's efficiency and effectiveness in responding to petitions by ensuring the timely receipt of petitions and any attachments in a central location.

The EPA has identified several benefits of establishing the electronic submittal system as the preferred submittal method for receiving title V petitions. For petitioners, the electronic submittal system will provide immediate confirmation to the petitioner that the petition was received by the agency. In contrast to the size limitations that can be experienced when sending title V petitions through email, petitioners will be able to see that all intended supporting materials are attached to the petition and are submitted in one entry. Thus, submitting a petition and attachments via the electronic submittal system would avoid the need to send multiple emails to transmit the entire petition package. Sending petitions through the electronic submittal system also eliminates timeliness issues from potential mishandling due to courier issues.

For the agency, there is a time savings as petitions and any attachments submitted through the electronic submittal system will be immediately and directly available to the agency. This saves administrative time otherwise spent processing the incoming petition and any attachments, especially those submitted separately from the petition. Thus, the EPA anticipates that using this system will facilitate more efficient processing for incoming petitions. Further, the electronic submittal system in its current form identifies the number of attachments a petitioner intends to submit, which can alert the EPA to any missing attachments.

More information about the electronic submittal system, including information about security concerns regarding providing personal information, uploading and/or downloading files, personally identifiable information (PII), and CBI is available at the CDX Web site: *https://cdx.epa.gov/*. If this rule is finalized and there is interest from commenters, the EPA will consider developing training webinars on the use of the electronic submittal system.

These proposed rule revisions to identify specific methods for petition submittal fall within the EPA's inherent discretion to formulate procedures to meet its obligations under CAA section 505(b)(2), as discussed in Section IV.A of this notice. In addition, the Act is silent as to the methods that should be used for title V petition submittal but imposes a 60-day deadline for granting or denying such petitions. Accordingly, these proposed changes to improve the efficiency of the EPA's initial processing of petitions and to support the agency's efforts to satisfy that obligation are based on a reasonable interpretation of CAA section 505(b)(2), including the relatively short timeframe for the EPA to grant or deny a petition.

3. Request for Comment

Comments are requested on all aspects of these proposed revisions. The EPA is also specifically soliciting comment on our proposal to add language to part 70 that identifies the electronic submittal of petitions through the agency's identified electronic submittal system as the preferred primary method for submitting a title V petition, as well as identifying two alternative methods that could be used in case of technical difficulties or by a petitioner without Internet access. Commenters are encouraged to address in their comments whether additional specification or direction is needed to ensure all stakeholders are aware and have a better understanding of the preferred electronic submittal process. The EPA is expressly requesting comment on whether the proposed regulatory revisions are necessary, or whether the same effect could be achieved through the direction provided in this preamble and through the title V petitions Web site. Further, the EPA is requesting comment on what, if any, outreach methods or training materials (*e.g.,* written instructions) would assist users with submitting petitions through the CDX system.

C. Required Petition Content and Format

1. Proposed Revisions

The following proposed regulatory changes are designed to assist the public with preparing their petitions, as well as to assist the EPA in its review of petitions. In this notice, the agency proposes to establish in the part 70 regulations key mandatory content requirements for title V petitions. These proposed requirements are based on statutory requirements under CAA section 505(b)(2) and aspects of the demonstration standard interpreted by the EPA in numerous title V petition orders and restated in Section III.D of this notice. By proposing to codify what has already been discussed in prior orders, the EPA aims to help all stakeholders understand the criteria that the EPA applies in reviewing a title V petition. The EPA also proposes to establish requirements to encourage similar formats for all petitions to further assist the agency in its review process.

a. Required Petition Content

The EPA is proposing to revise part 70 to require standard content that must be included in a title V petition, laying out the agency's expectations with more specificity to assist petitioners in understanding how to make their petitions complete and to enhance the EPA's ability to review and respond to them promptly. Under this proposal, a new section of the title V regulations, 40 CFR 70.12, would add the following list of required elements:

- Identification of the proposed permit on which the petition is based. The proposed permit is the version of the permit the permitting authority forwards to the EPA for the agency's 45-day review under CAA section 505(b)(1).[13] A petition would be required to provide the permit number, version number, and/or any other information by which the permit can be readily identified. In addition, the petition must specify whether the relevant permit action is an initial issuance, renewal, or modification/revision, including minor modifications/revisions.

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[13] A proposed permit may be any of the following permit actions: Initial permit, renewal permit, or permit modification/revision.

- Sufficient information to show that the petition was timely filed. A petition must be filed within 60 days after the expiration of the Administrator's 45-day review period, as required by section 505(b)(2) of the Act. Timeliness may be demonstrated by the electronic receipt date generated upon submittal of the petition through the agency's electronic submittal system, the date and time the emailed petition was received, or the postmark date generated for a paper copy mailed to the agency's designated physical address. It is helpful if the petition provides key dates, such as the end of the public comment period provided under 40 CFR 70.7(h), (or parallel regulations in an EPA-approved state, local or tribal title V permitting program), or the conclusion of the EPA 45-day review period for the proposed permit.
- Identification of Petition Claims. Any issue raised in the petition as grounds for an objection must be based on a claim that the permit, permit record, or permit process is not in compliance with the applicable requirements under the Act or requirements under part 70. All pertinent information in support of each issue raised as a petition claim must be included within the body of the petition. In determining whether to object, the Administrator would not consider information incorporated into the petition by reference (for example, comments offered during the public comment period on the draft permit that are incorporated by reference into the petition on the proposed permit, or, as another example, claims raised in one title V petition that are incorporated by reference into a different title V petition). However, petitions may and should still provide citations to support each petition claim (*e.g.,* citations to caselaw, statutory and regulatory provisions, or portions of the permit record). For each claim raised, the petition would need to identify the following:
  - ○ The specific grounds for an objection, citing to a specific permit term or condition where applicable.
  - ○ The applicable requirement under the CAA or requirement under part 70 that is not met. Note that the term "applicable requirement" refers to Clean Air Act requirements only, and does not include other requirements (*e.g.,* Endangered Species Act, Clean Water Act) to which a source may be subject. The term "applicable requirement" of the CAA for title V purposes is defined in 40 CFR 70.2.
  - ○ An explanation of how the term or condition in the proposed permit, or relevant portion of the permit record or permit process, is not adequate to comply with the corresponding applicable requirement under the CAA or requirement under part 70.
  - ○ If the petition claims that the permitting authority did not provide for the public participation procedures required under 40 CFR 70.7(h), the petition must identify specifically the required public participation procedure that was not provided.
  - ○ Identification of where the issue in the claim was raised with reasonable specificity during the public comment period provided for in 40 CFR 70.7(h), citing to any relevant page numbers in the public comment as submitted and attaching the submitted public comment to the petition. If the grounds for the objection were not raised during the public comment period, the petitioner must demonstrate that it was impracticable to raise such objections within the period or that they arose after such a period, as required by section 505(b)(2) of the Act and 40 CFR 70.8(d).
  - ○ Unless the exception under CAA section 505(b)(2) and 40 CFR 70.8(d) discussed in the immediately preceding bullet applies, the petition must identify where the permitting authority responded to the public comment, including the specific page number(s) in the document where the response appears, and explain how the permitting authority's response to the comment is inadequate to address the claimed deficiency. If the written RTC does not address the public comment at all or if there is no RTC, the petition should state that.

In addition to including all specified content, it is important that the information provided or any analysis completed by the petitioner must also be accurate. However, including this content would not necessarily result in the Administrator granting an objection on any particular claim raised in a petition. For example, a petitioner could include all this information but not demonstrate noncompliance, or the petition might point to a specific permit term as not being adequate to comply with an air emission limit, but may not have identified the appropriate applicable requirement.

One impediment to the EPA's review process is the use of incorporation by reference of other documents, in whole or in part, into petitions. As noted earlier in this section, under "identification of petition issues" in the new proposed mandatory content requirements, the EPA would require all pertinent information in support of each issue raised as a petition claim to be included in the body of a petition. Incorporating information into a petition by reference is inconsistent with the demonstration obligations in the statute and would extend the petition review time as the agency spends time searching for and then attempting to decipher the petitioner's intended claim. In practice, the EPA often finds that where claims have been incorporated by reference it is not clear that the specific grounds for objection have been raised by the petitioner, which could lead to the EPA denying for failure to meet the demonstration burden. Relatedly, petitioners have sometimes used incorporation by reference to include comments from a comment letter, but a comment letter alone would typically not address a state's response to the comment. *See, e.g. Nucor III Order* at 16 (noting that the "mere incorporation by reference . . . without any attempt to explain how these comments relate to an argument in the petition and without confronting [the State's] reasoning supporting the final permit is not sufficient to satisfy the petitioner's demonstration burden"). In practice, the EPA has found that the incorporation of comments by reference into a petition can lead to confusion concerning the rationale for the petitioner's arguments, as it is frequently unclear which part of the comment is incorporated, how it relates to the particular argument in the petition, and the precise intent of the incorporation. In addition, the incorporation of comments by reference increases the agency's review time, as the EPA must review more than one document to try to determine the complete argument that a petitioner is making. Therefore, the EPA is proposing to revise the regulations to state that the Administrator will not consider information incorporated by reference into a petition. However, a petition should still provide citations as needed to support its legal and factual assertions.

For further transparency and clarity, the EPA in this notice gives examples of types of information that are not necessary to include when preparing an effective petition. In doing so, the EPA hopes to ease the effort associated with preparing a petition while promoting succinctness. For example, while a petitioner needs to cite to the legal authority supporting its specific claim, a petition does not need to include pages of background or history on aspects of the CAA. If a petitioner wishes to include additional information for an alternate purpose unrelated to the EPA's review of the specific petition claim, the EPA recommends appending this information to the petition as a separate document and identifying the purpose for which it is provided.

b. Required Petition Format

Even with all necessary information provided, a petition may still require substantial time to review because of how it is organized. Therefore, the EPA is also proposing and taking comment on format requirements. If information is presented in the same format, including the same order, in all petitions, the EPA anticipates this standard organization could reduce review time as the general location of specific details would be the same in every petition received. These proposed format requirements could also help petitioners better understand what is, and what isn't, necessary in an effective title V petition. To that end, the EPA proposes the use of a standard format following the same order as previously identified in the list of required petition content. Regulatory language to this effect is included in the proposed new provision, 40 CFR 70.12. If finalized, templates and/or guidance are planned for development for inclusion on the title V petitions Web site.

Further, the EPA is requesting input from the public on several specific questions related to potentially establishing page limits for title V petitions, as explained further in Section IV.C.4 of this notice. While the EPA has received petitions ranging from approximately 3 to 82 pages (excluding attachments), the length for most petitions is in the range of 20 to 30. The amount of detail required to successfully raise a claim and meet the demonstration standard may depend on the complexity of the issue. However, we expect that most claims could be written effectively and succinctly, as demonstrated in the example claim that follows.

2. Example Claim

The following paragraphs contain an example of a concise and effective presentation of a hypothetical single claim that would be part of a larger petition—one that includes all pieces of required content for a claim proposed in this rule. Because this is only a sample claim, not a sample petition, it does not include some of the required content that relates to the petition as a whole (such as identifying information for the proposed permit). This example is organized following the order presented in the proposed required content changes identified previously, which is also the proposed standard format. The bullets highlight each element of the proposed content requirements.

Although EPA is providing this sample claim to illustrate how the material that would be required under the proposed regulatory revisions could be presented succinctly and effectively, the information that is needed to satisfy the demonstration burden for any given petition claim will vary depending on the specifics of the claim, the applicable requirements, and the underlying permit terms and record. The following hypothetical claim is provided solely for purposes of illustration:

- Specific Grounds for Objection, Including Citation to Permit Term

Facility X's title V permit lacks monitoring sufficient to assure compliance with the 4.5 pound per hour (lb/hr) nitrogen dioxide (NO_X) emission limitation of the approved State Implementation Plan (SIP) at 30 State Administrative Code 66.54.2. Specifically, Permit Condition I.D.26 requires that NO_X emissions from Facility X's combustion units (Units 1–6 and 11–14) cannot exceed 4.5 pounds of NO_X per hour. Permit Condition II.D.105 requires once-per-year portable analyzer monitoring for Units 1–6 and 11–14. The permit contains no other testing, monitoring, recordkeeping, or reporting requirements on these units, and contains no other monitoring that could be used determine compliance with the 4.5 lb/hr NO_X emission limit for the units.

- Applicable Requirement or Part 70 Requirement Not Met

CAA section 504(c), and the implementing regulations in 40 CFR 70.6(c)(1) and 70.6(a)(3)(i)(B), requires all title V permits to contain monitoring requirements to assure compliance with permit terms and conditions. *See also* 30 State Administrative Code 66.55.5(b) and (c) (same requirements in state's approved title V program). The permit does not meet this requirement as explained in the following analysis.

- Inadequacy of the Permit Term

The SIP-approved NO_X limitation does not include any periodic monitoring requirements, so 40 CFR 70.6(a)(3)(i)(B) requires state agency to add periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit. The monitoring added by the state in Permit Condition II.D.105 fails to satisfy that requirement under part 70 because monitoring only once annually for the engines units is inadequate to assure compliance with an hourly emission limit.

- Public Participation Procedure Not Provided

This petition does not claim that any public participation procedures were not provided.

- Issue Raised in Public Comments

Public Group Y (Petitioners) raised this issue on page 5 of the July 31, 2015 comment letter it submitted on Facility X's July 1, 2015 draft title V permit. (*See* Public Group Y Comments at 5; Petition Exhibit A at 5.)

- Analysis of State's Response

In responding to Petitioners' comment stating that the frequency of the permit's compliance monitoring for the compressor engines' 4.5 lb/hour NO_X limit was inadequate to assure compliance with the permit term, state agency asserted that "all that the title V provisions in 30 State Administrative Code 66.55.5(b) and the parallel requirements in 40 CFR 70.6(a)(3)(i)(B) require is periodic monitoring sufficient to yield reliable data that are representative of the source's compliance with the permit. Continuous monitoring is not required." [RTC] at 8; Petition Exhibit B at 8]. The RTC states that state agency's monitoring protocol for this unit type requires "quarterly portable analyzer testing on units with catalytic converters and annual testing on units without controls." *Id.* The RTC then concludes that "[b]ecause the portable analyzer test is a short term test, it demonstrates compliance with the emission limits for that time period. Due to the steady state operation of these units, state agency believes that the portable analyzer testing along with proper operation and maintenance of the units provides reasonable demonstration of compliance with hourly NO_X and CO emission limits." *Id.* Although state agency asserts that it included NO_X monitoring in accordance with its monitoring protocols for engines, state agency's RTC does not adequately explain how the monitoring in Facility X's permit is sufficient to assure compliance with the hourly NO_X limit in Permit Condition I.D.26.

As explained, state agency is relying on the portable analyzer test results as a snapshot sampling of emissions to confirm annually whether the units continue to meet their 4.5 lb/hour NO_X limits. Between annual portable analyzer tests, state agency relies on assumptions of steady state operation and "proper operation and maintenance of the units" to provide a "reasonable" demonstration of compliance with hourly NO_X emission limits. The RTC, however, does not identify any permit terms or conditions that require proper operation and maintenance of the units; nor does it provide an explanation (or appropriate citation to the technical discussion) of why it believes its assumptions about steady-state operations are reasonable for this equipment, or explain how such assumptions, in conjunction with an annual emissions test, constitute monitoring that demonstrates compliance with a short term limit. Accordingly, the EPA must grants the petition on this claim.

3. Why is the EPA proposing this change?

The CAA and part 70 regulations currently provide little information on what a title V petition must or should contain. In fact, the primary requirement in CAA section 505(b)(2) is that a petition (with a few identified exceptions) must be based on objections that were raised with reasonable specificity during the public comment period for the permit, and that is the only specific requirement for petition content in the relevant regulation. *See* CAA section 505(b)(2) and 40 CFR 70.8(d). As a result, the content and format of petitions have varied widely. In the agency's experience, many petitions fail to include key pieces of information, making it more time-consuming and resource-intensive for the EPA to assess the claim. Many petitions are also convoluted, include extraneous or irrelevant information, or fail to present the key information in a logical progression, making it difficult for the agency to ascertain the specific issue being raised. Contributing to the confusion, petitions frequently include large sections of text that appear to have been developed for other reasons and are not relevant to raising or evaluating a claim about a specific flaw in the title V permit or permitting process.

One of the EPA's desired outcomes for this proposed rule is to provide direction to petitioners that will assist them with preparing petitions. The agency anticipates receiving petitions that are both more concise and clear and that contain all the key relevant material, so that the EPA does not have to search for fundamental information or attempt to decipher the petitioner's intent. These proposed revisions are intended to facilitate a more effective petition development process and a more efficient petition review and response process, which are critical in this context because CAA section 505(b)(2) requires the agency to grant or deny a petition within 60 days. Similarly, this tight timeframe makes it imperative that a petitioner make a clear and concise demonstration that can be efficiently evaluated. By proposing to create obligations related to the content and structure of a petition, the EPA anticipates receiving petitions that more clearly articulate the petition claim and the basis for it, focusing on key information, including the alleged deficiency in the permit or permit process; the applicable requirements under the CAA or requirements under part 70 that are in question; and where the issue was raised during the public comment period (or a demonstration as to why it was impracticable to do so or that the grounds for the objection arose after the public comment period closed), how the state responded, and why that response did not adequately address the issue.

These proposed rules are consistent with statements and conclusions that the EPA has made in previous orders responding to title V petitions. The EPA has identified and emphasized the importance of such key pieces of information in assessing petitioners' claims that a title V permit or permit process does not assure compliance with applicable requirements under the CAA or under part 70. For context, examples of some of these orders were discussed in Section III.D of this notice. The EPA is proposing to add petition content requirements that would make certain information mandatory in petitions. These requirements would help clarify for petitioners specific information that is useful or necessary to evaluate a petition claim. The EPA anticipates that these mandatory petition content requirements and standard formatting would help petitioners to succinctly focus their claims and present them effectively. The EPA anticipates that these proposed changes could also decrease the instances in which the Administrator denies a petition because the petitioner did not provide an adequate demonstration. The agency believes these changes would help petitioners to hone their claims to include the appropriate information and to realize when a claim does not meet the mandatory requirements and should not be included in the petition (*e.g.,* the state adequately addressed the issue in its RTC).

The EPA expects the proposed revisions to require mandatory content to improve the efficiency of the agency's review process for title V petitions, as the key information would be presented in a clear and succinct fashion. Similarly, the agency expects that the proposed revisions to require similar organization for all petitions could reduce agency review time as a result of having the specific information in the same format in every petition received. Increasing the efficiency of the review process, and more specifically reducing the time it takes to review petitions, are consistent with Congress's intent that the petition process proceed in a timely and expeditious fashion, as indicated by the 60-day time frame for the Administrator to grant or deny petitions provided in CAA section 505(b)(2). *See Citizens Against Ruining the Environment,* 535 F.3d at 678 (noting that because the limited time frame Congress gave the EPA for permit review "may not allow the EPA to fully investigate and analyze contested allegations, it is reasonable in this context for the EPA to refrain from extensive fact-finding").

Moreover, as discussed in more detail in Section III.D of this notice, the EPA has explained in previous title V orders the importance of the demonstration burden in determining whether or not to grant an objection in response to a petition. *See, e.g., Nucor II Order* at 4–7. The Act does not dictate all the information that must be included or the format in which that information should be presented; nor does it address what kind of showing must be made in order to demonstrate that an objection is warranted. Courts have determined that the term "demonstrates" in CAA section 505(b)(2) is ambiguous and have accordingly deferred to the EPA's reasonable interpretation of that term. *See, e.g., MacClarence,* 596 F.3d at 1131 (finding the EPA's expectation that a petition provide "references, legal analysis, or evidence" a reasonable interpretation of the term "demonstrates" under CAA section 505(b)(2)). The proposed changes are aimed in part at helping petitioners ensure that they are including information in their petitions that is necessary to satisfy the demonstration burden, under the EPA's interpretation.

Furthermore, these proposed revisions to the part 70 rules related to mandatory petition content and format fall within the EPA's inherent discretion to formulate procedures to discharge its obligations under CAA section 505(b)(2), as discussed in Section IV.A of this notice. Similar procedural requirements have been established for other EPA programs and processes, including the procedures for appeals filed with the Environmental Appeals Board (EAB). *See* 78 FR 5281 (2013) (adopting revisions to "codify current procedural practices, clarify existing review procedures, and simplify the permit review process").

4. Request for Comment

Comments are requested on all aspects of these proposed revisions. The EPA is proposing changes to part 70 to include mandatory petition content and format to facilitate the efficient review of issues raised in petitions. The EPA requests comment on all aspects of the required petition content in the proposed 40 CFR 70.12, including the requirement to provide all key information, arguments, or analysis in the petition, rather than incorporating it by reference. The agency also requests comments on the proposed requirement that the petition format follow the same order as the proposed list of required content, as well as the proposed revision to the regulatory language in 40 CFR 70.8(d) that requires that copies of the petition be provided to the permitting authority and the applicant.

The EPA is also requesting comment on whether or not page limits should be established for title V petitions, as a means of promoting concise petitions and to further facilitate efficient and expeditious review of petitions by the EPA. Procedural requirements specifying the maximum length of submissions have been instituted for processes such as the EAB appeal process, where petitions and response briefs may not exceed an identified word or page limit. *See* 40 CFR 12419(d)(3) (limiting petitions and response briefs to either 14,000 words or alternatively, a 30-page limit). Based on the EPA's assessment of petitions received to date, most claims could be written effectively and succinctly in one or two pages. However, we recognize that some claims are more complex and could benefit from more space for an effective demonstration. If page limits were established in the final rules, petitioners would need to include the mandatory required content (if finalized) while adhering to a specified page limit. We also request comments on the following questions: if a page limit is established, what would be an adequate number of pages, excluding attachments, for a complete but concise petition? Would a page limit in the range of 15–20 or 20–30 pages be reasonable excluding attachments? What would be an adequate number of pages for a complete but concise claim? When responding to these questions, the EPA requests that commenters provide a rationale or basis for their responses.

D. Proposed Administrative Record Requirements

1. Proposed Revisions

The EPA proposes to revise 40 CFR 70.7 to require a permitting authority to respond in writing to significant comments received during the public participation process for a draft permit. The agency is proposing a regulatory revision to 40 CFR 70.8 that would require a written response to all significant comments (RTC) and the statement of basis document to be included as part of the proposed permit record that is sent to the EPA for its review under CAA section 505(b)(1).[14] Finally, the EPA proposes to revise 40 CFR 70.4(b), 70.7(h), and 70.8(a) to specifically identify the statement of basis document as a necessary part of the permit record throughout the permitting process. If no significant comments are received during the public comment period, the permitting authority should prepare and submit to EPA for its 45-day review a statement to that effect.

a. Response to Comments

Under the existing 40 CFR 70.7(h)(5), a permitting authority is required to keep a record of the commenters and also of the issues raised during the public participation process so that the Administrator may fulfill the obligation under CAA section 505(b)(2) of the Act to determine whether a title V petition may be granted. This provision also requires that such records shall be available to the public. The EPA is proposing regulatory language to revise 40 CFR 70.7 to add a new requirement that a permitting authority respond in writing to significant comments from the public participation process for a draft title V permit.[15] Significant comments in this context include, but are not limited to, comments that concern whether the title V permit includes terms and conditions addressing federal applicable requirements, including monitoring and related recordkeeping and reporting requirements. If no significant comments are received during the public comment period the permitting authority should prepare a statement to that effect.

b. Statement of Basis

The statement of basis document, which provides the legal and factual basis for the permit terms or conditions, is a necessary component for an effective permit review. Under the current regulations, permitting authorities are required to send this "statement of basis" to the EPA and "to any other person who requests it." 40 CFR 70.7(a)(5). The EPA recently compiled best practices for developing and preparing statement of basis documents in the April 2014 guidance document, *Implementation Guidance on Statement of Basis Requirements Under the Clean Air Act Title V Operating Permits Program.*[16] In most situations, the permitting authority makes the statement of basis document available for the public comment period on the draft permit (at least 30 days long), for the EPA's 45-day review, and during the 60-day petition period.

To address any occasions where it may be absent during the permit issuance process, the EPA now proposes to add language to the part 70 regulations that would reaffirm its importance and require its inclusion at all points in the permit review process for every permit. To that end, we are proposing that 40 CFR 70.4(b), 70.7(h) and 70.8(a) would be revised to specifically identify the statement of basis document as a required document.

c. Incorrect Reference

The EPA proposes one additional change to 40 CFR 70.4(b) to amend an incorrect reference. Specifically, the language in 40 CFR 70.4(b)(3)(viii) currently reads: "[t]he contents of a part 70 permit shall not be entitled to protection under section 115(c) of the Act." However, section 115(c) of the Act pertains to reciprocity related to statutory provisions addressing endangerment of public health or welfare in foreign countries from air pollution emitted in the United States.

Therefore, the EPA proposes to revise the citation in 40 CFR 70.4(b)(3)(viii) to section 114(c) of the Act, which pertains to the availability of records, reports, and information to the public. This change ensures the regulations comport with the parallel provision in the section 503(e) of the CAA, which states that: "The contents of a permit shall not be entitled to protection under section 7414(c) of this title."

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[14] While most permitting authorities prepare a separate RTC document, the response to significant comments may also be included within a statement of basis. Likewise, the statement of basis may be part of the title V permit, rather than a separate document. As long as there is clear indication that the RTC and statement of basis are provided along with the proposed permit, and where they can be found in the submission, the EPA will commence its 45-day review period.

[15] The EPA is aware that many permitting authorities elect to respond to all comments. While the EPA is proposing to require that permitting authorities must respond to all significant comments, the Agency's proposal is not intended to discourage permitting authorities from that practice.

[16] Memorandum from Stephen D. Page, Director, Office of Air Quality Planning and Standards, U.S. EPA, to Regional Air Division Directors, April 30, 2014. Available at: *https://www.epa.gov/sites/production/files/2015-08/documents/20140430.pdf.*

d. Commencement of EPA 45-Day Review Period

The agency considers both the statement of basis and the written RTC to be integral components of the permit record. Having access to these documents during the agency's 45-day review period could improve the efficiency of the review, and also ensures that the agency has these critical parts of the record before it in reviewing a proposed permit under CAA section 505(b)(1). Further, it ensures that these documents are completed and available during the petition period under CAA section 505(b)(2). The EPA is proposing revisions to part 70 to require that any proposed permit that is transmitted to the agency must include both the statement of basis and written RTC among the necessary information as described in 40 CFR 70.8. The agency is proposing that the 45-day review period would not begin until all the supporting information listed in the proposed revisions to 40 CFR 70.8(a)(1)(i) has been received by the EPA. This includes the proposed permit, statement of basis, and the written RTC (or when no significant comments are received during the public comment period a statement to that effect). Finally, the EPA proposes to revise 40 CFR 70.7(h)(7) to require that within 30 days of sending the proposed permit to the EPA, that permitting authorities must provide notification that the proposed permit and the response to significant public comments are available to the public. Such notice must explain how these materials may be accessed.

The EPA recognizes that some permitting authorities run the 30-day public comment period and 45-day EPA review period concurrently, as long as no significant comments are received. Under this proposal such a practice could continue, but if a significant public comment is received, the Administrator would no longer consider the submitted permit as a proposed permit. In such instances, the permitting authority must make any necessary revisions to the permit or permit record, and per the regulations proposed in this notice, resubmit the proposed permit to EPA with the RTC and statement of basis, and any other required supporting information, with any revisions that were made to address the public comments, to re-start the EPA's 45-day review period. This reflects the EPA's understanding of how such concurrent permitting programs currently operate.

e. Notification to the Public

Because the petition period runs from the end of the EPA's 45-day review period, and the date a proposed permit is received by the EPA is not always apparent, the petition deadline is not always readily apparent. To date, the agency has encouraged permitting authorities to provide notifications to the public or interested stakeholders regarding the timing of proposal of permits to the EPA, for example by making that information available either online or in the publication in which public notice of the draft permit was given. At this time, the agency is considering and requests comment on the best method for the public to be made aware of the date that a proposed permit is received by the EPA, as well as the deadline to submit a petition on a particular proposed permit. The EPA proposes to post when a proposed permit is received and the corresponding 60-day deadline for submitting a petition on the EPA Regional Office Web sites.

2. Why is the EPA proposing this change?

Section 505(a)(1)(B) of the CAA requires in relevant part that permitting authorities transmit to the Administrator each proposed permit. The current regulations contain the same requirement in 40 CFR 70.8(a)(1). Failure to submit any information necessary for the adequate review of the proposed permit is grounds for an objection. *See* 40 CFR 70.8(c)(3)(ii). Part 70 also currently requires that the permitting authority provide a statement of basis that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory and regulatory provisions). See 40 CFR 70.7(a)(5).

As a general matter, initial and renewed title V permits are developed by a permitting authority and then go through a public notice and comment period. The draft permit may undergo some revisions based on the public comment period and this updated version of the permit, referred to as the proposed permit, is sent to the EPA for a 45-day review period per CAA section 505(b)(1). Many permitting authorities already send a written RTC and a statement of basis along with the proposed permit for the EPA 45-day review. However, there are other permitting authorities that do not; instead this information may be provided by these permitting authorities at some point later in the permitting process. When these documents, and the RTC document in particular, are unavailable for the EPA review period, the EPA cannot provide a fully effective review. Moreover, when these documents are unavailable to the public following the EPA's review, potential petitioners may be missing necessary information to determine whether to submit a petition or to provide a full argument in support of any issues they may raise in a petition.

Notably, the EPA's 45-day review period under the current rules begins when the EPA has received the proposed permit and "all necessary information" from the permitting authority. 40 CFR 70.8(c). With regard to the availability of necessary information for the agency's 45-day review of a proposed permit, the EPA stated in the proposal to the original title V regulations that the agency believes it can object to the issuance of permit where the materials submitted by the permitting authority do not provide enough information to allow a meaningful EPA review of whether the proposed permit is in compliance with requirements of the Act (including the SIP). If the agency was not able to object under these circumstances, the EPA's oversight rule could be severely hampered. 56 FR 21750 (1991). The EPA continues to interpret the Act in this way and provides part of the rationale for these proposed revisions to the regulations.

In reviewing title V petitions, the EPA generally pays careful attention to the permitting authority's RTC. The EPA also explained the benefits of making the written RTC available during its 45-day review period in 2014 in the *Hu Honua Order:*

> [P]roviding the entire record for a Proposed Permit at the beginning of the EPA's 45-day review period serves to enhance the EPA's review of the Proposed Permit by providing a fuller understanding of the permitting history and the state's rationale for its permitting decisions. Where the entire record is available at the beginning of the 45-day review period, the EPA has the benefit of understanding the permitting history and the state's rationale for its permitting decisions. Likewise, where the entire record is available at the beginning of the public's 60-day window to submit petitions to the Administrator, the public has the benefit of understanding the permitting history and the state's rationale for its permitting decisions. Providing the entire record before the start of the public's 60-day petition period would allow the public to better assess any issues with the permit that they may have identified.

See, In the Matter of Hu Honua Bioenergy Facility, Order on Petition No. IX–2001–1 (July 2, 2014) at 30.

As noted in Section III.D.5 of this notice under general principles of administrative law, it is incumbent upon an administrative agency to respond to significant comments raised during the public comment period. *See, e.g., Home Box Office* v. *FCC,* 567 F.2d 9, 35 (D.C. Cir. 1977) ("the opportunity to comment is meaningless unless the agency responds to significant points raised by the public.") It is to the benefit of the permitting authority to respond to significant comments, as it is an opportunity to further refine the permit record and/or articulate the authority's rationale. As the issues raised in a title V petition must generally be raised with reasonable specificity during the comment period, responding to comments gives the permitting authority a chance to address any issues that may become the basis for a petition. Generally speaking, in order to make the demonstration required under CAA 505(b)(2), a petitioner is expected to address the permitting authority's final decision and reasoning, including any response in the RTC. *See MacClarence,* 596 F.3d at 1132–33; *see also, e.g., In the Matter of Noranda Alumina, LLC,* Order on Petition No. VI–2011–04 (December 14, 2012) at 20–21 (denying title V petition issue where petitioners did not respond to state's explanation in response to comments or explain why the state erred or the permit was deficient); *In the Matter of Kentucky Syngas, LLC,* Order on Petition No. IV–2010–9 (June 22, 2012) at 41 (denying title V petition issue where petitioners did not acknowledge or reply to state's response to comments or provide a particularized rationale for why the state erred or the permit was deficient). However, if the state has not responded to the comment, there is nothing for the petitioner to address. If the written RTC is not available during the petition period, it may not be clear how the petitioner would be able to address the permitting authority's response in its petition. Similarly, if a permitting authority has not adequately articulated its rationale for a particular permitting action that rationale may not be evident to the EPA from the permit record and a petitioner may be able to easily demonstrate that the articulated rationale is inadequate to support the action. For these reasons, without the availability of the written RTC during the petition period, there may be an increased likelihood of granting a particular claim on the basis that the state provided an inadequate rationale or permit record.

While many permitting authorities submit the RTC and statement of basis with a title V proposed permit, these proposed revisions, if finalized, would promote national consistency and the availability of the RTC document during the EPA 45-day review and the 60-day window in which a petition may be submitted on the proposed permit. This proposed requirement would allow a petitioner to better determine whether flaws in the permit, permit record, or public participation procedures raised during the public comment period had been adequately addressed. In turn, this would enhance a petitioner's confidence in its judgment whether a title V petition is warranted, because it would have the benefit of the permitting authority's rationale for permit terms and permit actions. Thus, it could facilitate resolution of issues earlier in the permitting process and may reduce the number of petitions or petition claims filed. Further, when properly implemented by permitting authorities, the agency anticipates that this proposed requirement would likely reduce the number of EPA determinations to grant a petition because a permitting authority's rationale is inadequate. The EPA is proposing this regulatory change to ensure that petitioners have the opportunity to address the permitting authority's response to comment in order to meet their demonstration burden. As such, these proposed revisions are supported by and would help implement the EPA's interpretation in this context of the ambiguous term "demonstrate" under CAA section 505(b)(2). *See MacClarence,* 596 F.3d at 1132–33 (finding the EPA's expectation that a petitioner challenge a permitting authority's final reasoning as reflected in the statement of basis of the permit a reasonable interpretation of the demonstration requirement).

These proposed changes are responsive to recommendations from the CAAAC Title V Task Force Final Report. The 2006 report included a number of recommendations for implementation improvements, including specific recommendations regarding public notification and public participation in the title V process. The majority of Task Force members agreed that if a permitting authority receives comments on a draft permit, it is essential that the permitting authority prepare a written response to comments. *See* Title V Task Force Final Report Recommendation 1 at page 238. The majority of Task Force members also recommended that if a permitting authority received public comments (from anyone other than the permittee) during the public comment period, the RTC described in Recommendation 1 should be provided to the EPA for consideration during its 45-day review period. *See* Title V Task Force Final Report Recommendation 2 at 239.

While the Act does not expressly require the submission of the RTC and statement of basis together with the proposed permit, it also does not preclude such a requirement or prescribe the specific materials that are needed to review a proposed permit. In light of the focus of CAA section 505(b)(2) on issues raised with reasonable specificity during the comment period, it is reasonable to interpret the Act to include a requirement that would allow the EPA and the public access to materials such as the RTC and statement of basis that would allow them to evaluate the issues raised with reasonable specificity during the comment period and the permitting authority's response.

The agency believes these proposed revisions to the part 70 rules are within the EPA's inherent discretion to formulate procedures to discharge its obligations under CAA sections 505(b)(1) and 505(b)(2), as discussed in Section IV.A of this notice. If finalized, it would help the EPA more efficiently review both proposed permits and title V petitions.

3. Request for Comment

Comments are requested on all aspects of these proposed revisions. Comments are specifically requested on the proposed regulatory language requiring the preparation of a written RTC. Additionally, the EPA requests comment on all aspects of the proposal to require both the written RTC and statement of basis be included in the record that is sent with the proposed title V permit for the EPA's 45-day review. The EPA is expressly taking comment on the best method(s) for proposed permits to be made available so that the public is aware when a proposed permit is received by the EPA for its 45-day review. States are also encouraged to provide information on whether any changes to state rules and programs would be necessary if this proposed revision to part 70 were finalized. The EPA is also expressly taking comment on the practices of permitting authorities that conduct concurrent review and is particularly interested in what processes or steps should be followed to allow for concurrent review, even if the permitting authority is not aware of whether or not it will receive comment on the title V permit when that permit is initially submitted to EPA. Finally, the EPA solicits comments on the proposed regulatory language in 40 CFR 70.4, 70.7, and 70.8 requiring the statement of basis is necessary or appropriate to ensure the document is available at all stages of the permit issuance process, or whether including it in fewer provisions would be adequate (and if so, which ones).

V. Pre- and Post-Petition Process Information/Guidance

In this section of the notice, the EPA is providing information on certain steps in the title V petition process, namely the permit issuance process that occurs before a petition is submitted, and the post-petition process, which occurs after the EPA grants an objection on at least one issue in a petition. The EPA anticipates this information will help stakeholders gain a better understanding of the role a petition might play in the development of a permit that assures compliance with applicable requirements under the CAA and part 70. Most of what follows has been addressed publicly in various formats, but the EPA believes that repeating this information here for the public's convenience will provide stakeholders with a comprehensive look at the petition opportunity in CAA section 505(b)(2) and 40 CFR 70.

A. Recommended Practices for Complete Permit Records

1. Recommended Practices for Permitting Authorities

The proposed changes in Section IV.D of this notice are intended to increase the effectiveness of the EPA 45-day review as well as ensure that the full permit record is before petitioners during the 60-day petition period. Making these documents available also provides an opportunity for a permitting authority to ensure that they have fully responded to comments when preparing the proposed permit. Permitting authorities have at least three opportunities to provide the permit record and ensure that it comports with the CAA: the draft, proposed, and final permit.

While the EPA is not requiring the following actions, the agency is recommending practices for permitting authorities when preparing title V permits. In the agency's experience, these practices can minimize the likelihood that a petition will be submitted on a title V permit. Many involve taking action at an appropriate time to ensure that the permit includes the conditions to assure compliance with applicable requirements under the CAA and part 70. In addition, many focus on consulting with the appropriate EPA Regional Office early when preparing and issuing permits. These "recommended practices" include:

- ○ Consulting with the appropriate EPA Regional Office as needed on key aspects of the permit before the draft permit stage, especially if the permit is expected to be highly visible or contested.
- ○ On a case-by-case basis, considering whether a particular draft permit warrants outreach to the community.
- ○ On a case-by-case basis, considering whether it is appropriate to provide for a public participation opportunity on a revised draft permit.
- ○ Fully addressing significant comments on draft permits and ensuring the permit or permit record includes adequate rationale for the decisions made. For example, permitting authorities should provide sufficient rationale for selected monitoring to assure compliance. The EPA's objections based on an inadequate record most often occur when the EPA finds that a permitting authority did not sufficiently explain why the monitoring was sufficient to assure compliance with a particular limit.
- ○ Consulting with the appropriate EPA Regional Office as needed to resolve issues related to comments on draft permits and incorporating those resolutions into the proposed permits.
- ○ Consulting with the appropriate EPA Regional Offices as needed to resolve issues related to the EPA objections or comments on proposed permits and incorporating those resolutions into the final permits.
- ○ For petitions on which the EPA grants an objection on a claim because the record is inadequate, revising the record and permit as necessary and in a timely manner to resolve the objection.
- ○ Reviewing permits that are the subject of a petition and revising or reopening for cause to address any issues raised by the petition that have not been resolved.
- ○ Posting the proposed permit and RTC online where possible.

2. Recommended Practices for Permit Applicants

The EPA is providing the following recommended practices for a source to consider to help ensure that its permit includes the conditions to assure compliance with applicable requirements under the CAA and part 70. In some cases, this may minimize the likelihood that a petition will be submitted on its title V permit. These "recommended practices" include:

- ○ Submitting permit applications that include all information required under the approved title V permit program.
- ○ Consulting with the permitting authority when any discrepancy or inaccuracy is identified in the permit, at any stage of the permitting process.
- ○ Promptly providing any updates to the permit application to the permitting authority.
- ○ If public comments identify an issue in the draft permit, contacting the permitting authority to make revisions to address the concern before the permit is proposed to the EPA.
- ○ Timely responding to inquiries from the permitting authority at each stage in the permitting process, including the draft, proposed, and final stages.

B. Post-Petition Process

The following discussion provides information about the activities that occur, or may occur, after the EPA responds to a title V petition. Various stakeholders have indicated there can be confusion around the appropriate steps following an EPA petition order, particularly when the Administrator granted the petition in whole or in part. The summary below describes EPA's interpretation of key provisions of the CAA and implementing regulations. This interpretation has already been shared publicly in title V orders responding to petitions. *See, e.g., In the Matter of Public Service of New Hampshire Schiller Station,* Order on Petition Number VI–2014–04 (July 28, 2015) at 4; *In the Matter of Meraux Refinery,* Order on Petition Number VI–2012–04 (May 29, 2015) at 7–10. In the interest of providing additional transparency and clarity for the title V petition process, and for the public's convenience, the EPA repeats that interpretation in the following paragraphs.

When the EPA objects to a proposed permit under CAA section 505(b), section 505(b)(3) instructs that a permitting authority "may not issue the permit unless it is revised and issued" in accordance with section 505(c) of the Act. If the permit has already been issued by the permitting authority before it receives the objection, then the EPA "shall modify, terminate, or revoke" the permit, and the permitting authority may then only issue a revised permit in accordance with section 505(c) of the Act.

Under CAA section 505(c), if the permitting authority fails to submit a permit revised to meet the Administrator's objection within 90 days after the objection, the Administrator must issue or deny the permit in accordance with the requirements under title V. Section 505(c) further provides that no objection is subject to judicial review until the Administrator takes final action to issue or deny the permit.

Neither CAA section 505(b)(3) nor section 505(c) provide express direction as to the specific procedures and steps the EPA must use to "modify, terminate, or revoke" or "issue or deny" the permit, though section 505(c) points generally to the requirements under title V. Although the Act is ambiguous, the implementing regulations shed some light on the process. Those regulations provide a state with 90 days to resolve the EPA's objection and terminate, modify, or revoke and reissue the permit, before the EPA would need to begin to act on the permit. 40 CFR 70.8(d), 70.7(g)(4)–(5); *see also* 40 CFR 71.4(e) (the EPA will take permitting action under part 71, when, among other things, a state fails to respond to the EPA's objection). A permitting authority may address an EPA objection by, among other things, providing the EPA with a revised permit. *See, e.g.,* 40 CFR 70.7(g)(4). In some cases, the permitting authority's response to an EPA objection may not involve a revision to the permit terms and conditions themselves, but may instead involve revisions to the permit record. As an example, a permitting authority might opt to include additional rationale and detail to support its decision in response to the EPA's objection if such objection was based on the grounds that the permit record does not adequately support the permitting authority's decision. Whether the permitting authority submits revised permit terms, a revised permit record, or other revisions to the permit, the permitting authority's response is generally treated as a new proposed permit.[17]

As described in previous title V orders, such as the 2013 *Nucor II Order,* the EPA has generally treated the permitting authority response as a new proposed permit which is subject to the agency's opportunity to conduct a 45-day review per CAA 505(b)(1) and 40 CFR 70.8(c), and an opportunity for a petition if the EPA does not object. As stated in the *Nucor II Order:*

> [T]he EPA viewed the revised permit as providing the EPA an opportunity to object to the permit under CAA section 505(b)(1) and 40 CFR 70.8(c), and, when the EPA did not object, an opportunity for a citizen to petition the EPA to object under CAA section 505(b)(2) and 40 CFR 70.8(d). The EPA has also treated state responses to EPA objections that revised the permit record to provide further support for its decision as constituting new proposed permits subject to review by the EPA under CAA section 505(b)(1) and 40 CFR 70.8(c), and, absent an EPA objection, citizen petition under CAA section 505(b)(2) and 40 CFR 70.8(d). *See, e.g., In the Matter of KerrMcGee/Anadarko Petroleum Corp., Frederick Compressor Station,* Order on Petition VIII–2008–02, at 2–3 (Oct. 8, 2009); *In the Matter of Anadarko Petroleum Corp., Frederick Compressor Station,* Order on Petition VIII–2010–4, at 4–5 (Feb. 2, 2011). A permitting authority's rationale for its permit terms is a fundamental component of its permit decision. Accordingly, the EPA has viewed a state response to an EPA objection that buttresses its basis for its permit decision as a new proposed permit for purposes of CAA section 505(b) and 40 CFR 70.8(c) and (d).

Nucor II Order at 14.

The EPA's interpretation that a state's response to an EPA objection generally triggers a new EPA review and petition opportunity is consistent with, and a reasonable interpretation of, the statutory and regulatory process for addressing objections by the EPA, as explained previously. Accordingly, at the end of the 45-day review period, if the EPA does not object, there is a 60-day window in which there is an opportunity for a second petition. If a second petition is received, the EPA must respond to the petition within 60 days under CAA section 505(b)(2).

VI. Implementation

Costs associated with this proposed rule are expected to be minimal. Much of the focus in this proposal is to codify the established practice that has been publicly discussed and evolved over time. If finalized, the revisions should impose no costs on petitioners, and may reduce confusion over and the time necessary for preparing a title V petition. The agency anticipates that a small number of permitting authorities may need to amend their rules regarding permit issuance to require responses to significant comments and the submittal of those responses with the proposed permit that is sent to the EPA for review.

The existing part 70 regulations provide for state program revisions if part 70 is revised and the EPA determines such conforming changes are necessary. 40 CFR 70.4(a) and 70.4(i). The EPA is soliciting comment as to whether revisions to any approved state programs would be necessary if the revisions to part 70 regulations proposed in this notice are finalized. States are expressly encouraged to provide information on any changes to state rules and programs that may be necessary if the proposed revisions to 40 CFR 70.7(h) and 70.8 are finalized to require permitting authorities to respond in writing to all significant comments raised during the public participation process and to provide that response to the EPA for the agency's 45-day review period.

VII. Proposed Determination of Nationwide Scope and Effect

Section 307(b)(1) of the CAA indicates which Federal Courts of Appeal have venue for petitions of review of final agency actions by the EPA under the CAA. This section provides, in part, that petitions for review must be filed in the U.S. Court of Appeals for the District of Columbia Circuit (i) when the agency action consists of nationally applicable regulations promulgated, or final actions taken, by the Administrator; or (ii) when such action is locally or regionally applicable, if the action is determined to be of nationwide scope or effect and the Administrator publishes such a determination. The EPA proposes to find and publish that this rule is based on a determination of nationwide scope and effect. This proposed rule concerns revisions to the EPA's regulations in part 70 for operating permit programs, and these regulations apply to permitting programs across the country. Accordingly, we propose to determine that this is a rulemaking of nationwide scope or effect such that any petitions for review must be filed in the U.S. Court of Appeals for the District of Columbia Circuit.

VIII. Environmental Justice Considerations

This action proposes certain revisions to part 70 regulations to improve the title V petition submittal, review and response processes. The proposed revisions and guidance provided in this rule should increase the transparency and clarity of the petition process for all stakeholders. First, the establishment of centralized petition submittal is expected to reduce or eliminate confusion over where to submit a petition. When using the preferred method of an electronic petition submittal through the agency's electronic submittal system, a petitioner will also have immediate assurance that the petition and any attachments were received. However, alternative submittal methods are still available options for members of the public that experience technical difficulties when trying to submit a petition or for those that do not have access to electronic submittal mechanisms. Second, the proposed required content and format provides instruction and clarity on what must be included in a petition. This change is anticipated to assist petitioners in providing all the critical information in their petitions in an effective manner, which may increase the agency's efficiency in responding to petitions. Third, the proposed regulatory changes would require permitting authorities to respond to public comments in a written document that is provided to the EPA for the agency's 45-day review and is available during the 60-day opportunity to file a title V petition, which will provide increased availability of information regarding permits for the public in general and petitioners specifically. Further, this change may provide more timely notification of pertinent steps and documents in the permit issuance process. Fourth, the recommended practices for permitting authorities and sources, if followed, may improve the quality of public participation and the operating permits being issued. Finally, the description of the post-petition process is anticipated to reduce confusion regarding the appropriate steps when the EPA grants a petition for an objection on a particular issue. This proposed action does not compel any specific changes to the requirements to provide opportunities for public participation in permitting nor does it finalize any particular permit action that may affect the fair treatment and meaningful involvement of all people. Further, this proposed action is responsive to some of the feedback received during the Environmental Justice in Permitting workshops the agency provided in the North Birmingham area on September 15 and 16, 2014 and other such meetings held in EPA's Region 4.

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[17] When the permitting authority decides to modify a permit in order to resolve an EPA objection, it must go through the appropriate procedures for that modification. For example, when the permitting authority's response to an objection is a change to the permit terms or conditions or a revision to the permit record, the permitting authority should determine whether its response is a minor modification or a significant modification to the title V permit, as described in 40 CFR 70.7(e)(2) and (4) or the corresponding regulations in the state's EPA-approved title V program. If the permitting authority determines that the modification is a significant modification, then the permitting authority must provide for notice and opportunity for public comment for the significant modification consistent with 40 CFR 70.7(h). In other words, EPA's view that the state's response to an EPA objection is a generally treated as a new proposed permit does not alter the procedures for making the changes to the permit terms or condition or permit record that are intended to resolve EPA's objection.

In preparation for this proposal, the agency participated in community calls where the EPA presented a brief overview and announcement of the rulemaking effort. The EPA provided additional details about a planned webinar that will describe the title V petition process, the content of this proposal, and when and how to submit comments.

IX. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act (PRA)

This action would not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control number 2060–0243 for the title V part 70 program. To the extent that a SIP revision or a title V program revision is necessary to effect the changes being proposed, we believe that the burden is already accounted for under the approved information collection requests noted earlier.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This proposed action would not impose any requirements directly on small entities. Entities potentially affected directly by this proposal include anyone that chooses to submit a title V petition on a proposed title V permit prepared by an EPA-approved state, local or tribal title V permitting authority. Other entities directly affected may include state, local, and tribal governments and none of these governments are small governments. Other types of small entities are not directly subject to the requirements of this action.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded federal mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and would not significantly or uniquely affect small governments. This proposed action imposes no enforceable duty on any state, local or tribal governments or the private sector.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effect on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action has tribal implications. However, it will neither impose substantial direct compliance costs on federally recognized tribal governments, nor preempt tribal law. The Southern Ute Indian Tribe has an EPA-approved operating permit program under 40 CFR part 70 and could be impacted. The EPA conducted outreach to the tribes through a call with the National Tribal Air Association. Further, the agency plans to offer consultation to all tribal governments, and will specifically offer to consult with the Southern Ute Indian tribe. The EPA solicits comment from affected tribal governments on the implications of this proposed rulemaking.

G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

The EPA interprets Executive Order 13045 as applying to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of "covered regulatory action" in section 2–202 of the Executive Order. This proposed action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

This rulemaking does not involve technical standards.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes the human health and environmental risk addressed by this proposed action will not have potential disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous populations. The results of this evaluation are contained in Section

VIII of this notice titled, "Environmental Justice Considerations."

K. Determination Under Section 307(d)

Section 307(d)(1)(V) of the CAA provides that the provisions of CAA section 307(d) apply to "such other actions as the administrator may determine." Pursuant to CAA section 307(d)(1)(V), the Administrator determines that this proposed action is subject to the provisions of CAA section 307(d).

VIII. Statutory Authority

The statutory authority for this proposed action is provided by 42 U.S.C. 7401 *et seq.*

List of Subjects in 40 CFR Part 70

Environmental protection, Administrative practice and procedure, Air pollution control, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: August 15, 2016.

Gina McCarthy,

Administrator.

For the reasons stated in the preamble, title 40, Chapter I of the Code of Federal Regulations is proposed to be amended as set forth below.

PART 70—STATE OPERATING PERMIT PROGRAMS

■ 1. The authority citation for the part 70 continues to read as follows:

Authority: 42 U.S.C. 7401, *et seq.*

■ 2. Section 70.4 is amended by revising paragraph (b)(3)(viii) to reads as follows:

§ 70.4 State program submittals and transition.

* * * * *

(b) * * *

(3) * * *

(viii) Make available to the public any permit application, statement of basis, compliance plan, permit, and monitoring and compliance certification report pursuant to section 503(e) of the Act, except for information entitled to confidential treatment pursuant to section 114(c) of the Act. The contents of a part 70 permit itself shall not be entitled to protection under section 114(c) of the Act.

* * * * *

■ 3. Section 70.7 is amended by:

■ a. Revising paragraphs (h)(2) and (5); and

■ b. Adding paragraphs (h)(6) and (7).

The revisions and additions read as follows:

§ 70.7 Permit issuance, renewal, reopenings, and revisions.

* * * * *

(h) * * *

(2) The notice shall identify the affected facility; the name and address of the permittee; the name and address of the permitting authority processing the permit; the activity or activities involved in the permit action; the emissions change involved in any permit modification; the name, address, and telephone number of a person from whom interested persons may obtain additional information, including copies of the draft permit, statement of basis for the draft permit, the application, all relevant supporting materials, including those set forth in § 70.4(b)(3)(viii), and all other materials available to the permitting authority that are relevant to the permit decision; a brief description of the comment procedures required by this part; and the time and place of any hearing that may be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled);

* * * * *

(5) The permitting authority shall keep a record of the commenters and of the issues raised during the public participation process, as well as records of the written comments submitted during that process, so that the Administrator may fulfill his obligation under section 505(b)(2) of the Act to determine whether a citizen petition may be granted, and such records shall be available to the public.

(6) The permitting authority shall respond in writing to all significant comments raised during the public participation process, including any such written comments submitted during the public comment period and any such comments raised during any public hearing on the permit. If no significant comments are raised during the public participation process, the permitting authority shall prepare a written statement to that effect.

(7) The permitting authority shall give notice within 30 days of transmitting the proposed permit to the Administrator, consistent with the procedures under paragraph (h)(1) of this section, that the proposed permit in accordance with § 70.8(a)(1) and responses to public comments in accordance with paragraph (h)(6) of this section have been transmitted to the EPA, the date of the transmission, and that these documents are available to the public. Such notice shall explain how the public may access the proposed permit and responses to comments. When possible, such notice shall include notification in the same manner used to announce the availability of the draft permit for public comment.

■ 4. Section 70.8 is amended by revising paragraphs (a)(1), (c)(1) and (d) to read as follows:

§ 70.8 Permit review by EPA and affected States.

(a) *Transmission of information to the Administrator.* (1) (i) The permit program shall require that the permitting authority provide to the Administrator a copy of each permit application (including any application for significant or minor permit modification), the statement of basis for each proposed permit and for each final permit, each proposed permit, each final permit, the written response to comments (which shall include a written response to all significant comments raised during the public participation process on the draft permit and recorded under § 70.7(h)(5), or if no significant comments are received, a statement to that effect), and an explanation of how those public comments and the permitting authority's responses are available to the public. The applicant may be required by the permitting authority to provide a copy of the permit application (including the compliance plan) directly to the Administrator. Upon agreement with the Administrator, the permitting authority may submit to the Administrator a permit application summary form and any relevant portion of the permit application and compliance plan, in place of the complete permit application and compliance plan. To the extent practicable, the preceding information shall be provided in computer-readable format compatible with EPA's national database management system. The Administrator's 45-day review period for this proposed permit will not begin until the proposed permit and all necessary supporting material required under this paragraph have been received by the EPA.

(ii) In instances where the Administrator has received a proposed permit from a permitting authority before the public participation process on the draft permit has been completed, and the permitting authority receives a significant comment on the draft permit after the submission of the proposed permit to the Administrator, the Administrator will no longer consider the submitted proposed permit as a permit proposed to be issued under section 505 of the Act. In such instances, the permitting authority must make any revisions to the permit or permit record necessary to address the public comments, including preparation or revision of the response to comment document, and must re-submit the proposed permit and all necessary supporting material required in paragraph (a)(1)(i) of this section to the Administrator after the public comment period has closed. The Administrator's 45-day review period for this proposed permit will not begin until the proposed permit and all necessary supporting material required under paragraph (a)(1)(i) of this section have been received by the EPA.

* * * * *

(c) * * *

(1) The Administrator will object to the issuance of any proposed permit determined by the Administrator not to be in compliance with applicable requirements or requirements under this part. No permit for which an application must be transmitted to the Administrator under paragraph (a) of this section shall be issued if the Administrator objects to its issuance in writing within 45 days of receipt of the proposed permit and all necessary supporting information required under paragraph (a)(1) of this section.

* * * * *

(d) *Public petitions to the Administrator.* The program shall provide that, if the Administrator does not object in writing under paragraph (c) of this section, any person may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection. The petitioner shall provide a copy of such petition to the permitting authority and the applicant. Any such petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided for in § 70.7(h), unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period. If the Administrator objects to the permit as a result of a petition filed under this paragraph, the permitting authority shall not issue the permit until EPA's objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and prior to an EPA objection. If the permitting authority has issued a permit prior to receipt of an EPA objection under this paragraph, the Administrator will modify, terminate, or revoke such permit, and shall do so consistent with the procedures in § 70.7(g) (4) or (5) (i) and (ii) except in unusual circumstances, and the permitting authority may thereafter issue only a revised permit that satisfies EPA's objection. In any case, the source will not be in violation of the requirement to have submitted a timely and complete application.

* * * * *

■ 5. Section 70.12 is added to read as follows:

§ 70.12 Public Petition Requirements.

Standard petition requirements. Each public petition sent to the Administrator under 70.8(d) of this part shall include the following elements in the following order:

(a) *Identification of the proposed permit on which the petition is based.* The petition shall provide the permit number, version number, or any other information by which the permit can be readily identified. The petition shall specify whether the permit action is an initial permit, a permit renewal, or a permit modification/revision, including minor modifications/revisions.

(b) Sufficient information to show that the petition was timely filed.

(c) *Identification of Petition Claims.* Any issue raised in the petition as grounds for an objection shall be based on a claim that the permit, permit record, or permit process is not in compliance with applicable requirements or requirements under this part. All pertinent information in support of each issue raised as a petition claim shall be contained within the body of the petition. In determining whether to object, the Administrator will not consider arguments, assertions, claims, or other information incorporated into the petition by reference. For each claim raised, the petition shall identify the following:

(1) The specific grounds for an objection, citing to a specific permit term or condition where applicable.

(2) The applicable requirement as defined in § 70.2, or requirement under part 70, that is not met.

(3) An explanation of how the term or condition in the permit, or relevant portion of the permit record or permit process, is not adequate to comply with the corresponding applicable requirement or requirement under part 70.

(4) If the petition claims that the permitting authority did not provide for a public participation procedure required under § 70.7(h), the petition must identify specifically the required public participation procedure that was not provided.

(5) Identification of where the issue was raised with reasonable specificity during the public comment period provided for in § 70.7(h), citing to any relevant page numbers in the public comment submitted to the permitting authority and attaching this public comment to the petition. If the grounds for the objection were not raised with reasonable specificity during the public comment period, the petitioner must demonstrate that such grounds arose after that period, or that it was impracticable to raise such objections within that period, as required under § 70.8(d).

(6) Unless the grounds for the objection arose after the public comment period or it was impracticable to raise the objection within that period such that the exception under § 70.8(d) applies, the petition must identify where the permitting authority responded to the public comment, including page number(s) in the publicly available written response to comment, and explain how the permitting authority's response to the comment is inadequate to address the issue raised in the public comment. If the response to comment document does not address the public comment at all, the petition shall state that.

■ 6. Section 70.13 is added to read as follows:

§ 70.13 Documents that May be Considered in Reviewing Petitions.

The information that the Administrator considers in making a determination whether to grant or deny a petition submitted under § 70.8(d) on a proposed permit generally includes, but is not limited to, the Administrative Record for the proposed permit and the petition, including attachments to the Petition. For purposes of this paragraph, the Administrative Record for a particular proposed permit includes the draft and proposed permits; any permit applications that relate to the draft or proposed permits; the statement of bases for the draft and proposed permits; the permitting authority's written responses to comments, including responses to all significant comments raised during the public participation process on the draft permit; relevant supporting materials made available to the public according to § 70.7(h)(2); and all other materials available to the permitting authority that are relevant to the permitting decision and that the permitting authority made available to the public according to § 70.7(h)(2). If a final permit and a statement of basis for the final permit are available during the agency's review of a petition on a proposed permit, those documents may also be considered as part of making a determination whether to grant or deny the petition.

■ 7. Section 70.14 is added to read as follows:

§ 70.14 Submission of Petitions.

Any petition to the Administrator shall be submitted through the Operating Permits Group in the Air Quality Policy Division in the Office of Air Quality Planning and Standards, using one of the three following methods identified at the Title V Petitions Web site: An electronic submission through the EPA's designated submission system (the agency's preferred method); an electronic submission through the EPA's designated email address listed on that Web site; or a paper submission to the EPA's designated physical address listed on that Web site. Any necessary attachments shall be submitted together with the petition, using the same method as for the petition. Once a petition has been successfully submitted using one of these three methods, the petitioner should not submit additional copies of the petition using another method. The Administrator is not obligated to consider petitions submitted to the agency using any method other than the three identified in this paragraph.

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 721

[EPA–HQ–OPPT–2016–0491; FRL–9951–06]

RIN 2070–AB27

Significant New Use Rule on Certain Chemical Substances

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing significant new use rules (SNURs) under the Toxic Substances Control Act (TSCA) for two chemical substances which were the subject of premanufacture notices (PMNs). This action would require persons who intend to manufacture (defined by statute to include import) or process any of the chemical substances for an activity that is designated as a significant new use by this proposed rule to notify EPA at least 90 days before commencing that activity. The required notification initiates EPA's evaluation of the intended use within the applicable review period. Manufacture and processing for the significant new use is unable to commence until EPA has conducted a review of the notice, made an appropriate determination on the notice, and taken such actions as are required in association with that determination.

DATES: Comments must be received on or before September 23, 2016.

ADDRESSES: Submit your comments, identified by docket identification (ID) number EPA–HQ–OPPT–2016–0491, by one of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the online instructions for submitting comments. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.
- *Mail:* Document Control Office (7407M), Office of Pollution Prevention and Toxics (OPPT), Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001.
- *Hand Delivery:* To make special arrangements for hand delivery or delivery of boxed information, please follow the instructions at *http://www.epa.gov/dockets/contacts.html.*

Additional instructions on commenting or visiting the docket, along with more information about dockets generally, is available at *http://www.epa.gov/dockets.*

FOR FURTHER INFORMATION CONTACT:

For technical information contact: Kenneth Moss, Chemical Control Division (7405M), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; telephone number: (202) 564–9232; email address: *moss.kenneth@epa.gov.*

For general information contact: The TSCA-Hotline, ABVI-Goodwill, 422 South Clinton Ave., Rochester, NY 14620; telephone number: (202) 554–1404; email address: *TSCA-Hotline@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

You may be potentially affected by this action if you manufacture, process, or use the chemical substances contained in this proposed rule. The following list of North American Industrial Classification System (NAICS) codes is not intended to be exhaustive, but rather provides a guide to help readers determine whether this document applies to them. Potentially affected entities may include:

Manufacturers (including importers) or processors of one or more subject chemical substances (NAICS codes 325 and 324110), *e.g.,* chemical manufacturing and petroleum refineries.

This action may also affect certain entities through pre-existing import certification and export notification rules under TSCA. Chemical importers are subject to the TSCA section 13 (15 U.S.C. 2612) import certification requirements promulgated at 19 CFR 12.118 through 12.127 and 19 CFR 127.28. Chemical importers must certify that the shipment of the chemical substance complies with all applicable rules and orders under TSCA. Importers of chemicals subject to these SNURs must certify their compliance with the SNUR requirements. The EPA policy in support of import certification appears at 40 CFR part 707, subpart B. In addition, any persons who export or intend to export a chemical substance that is the subject of this proposed rule on or after September 23, 2016 are subject to the export notification provisions of TSCA section 12(b) (15 U.S.C. 2611(b)) (see § 721.20), and must comply with the export notification requirements in 40 CFR part 707, subpart D.

B. What should I consider as I prepare my comments for EPA?

1. *Submitting CBI.* Do not submit this information to EPA through regulations.gov or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD–ROM that you mail to EPA, mark the outside of the disk or CD–ROM as CBI and then identify electronically within the disk or CD–ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. *Tips for preparing your comments.* When preparing and submitting your comments, see the commenting tips at *http://www.epa.gov/dockets/comments.html.*

II. Background

A. What action is the agency taking?

EPA is proposing these SNURs under TSCA section 5(a)(2) for two chemical substances which were the subject of PMNs P–14–321 and P–14–323. These SNURs would require persons who intend to manufacture or process any of these chemical substances for an activity that is designated as a significant new use to notify EPA at least 90 days before commencing that activity.

B. What is the agency's authority for taking this action?

Section 5(a)(2) of TSCA (15 U.S.C. 2604(a)(2)) authorizes EPA to determine that a use of a chemical substance is a "significant new use." EPA must make this determination by rule after considering all relevant factors, including the four bulleted TSCA section 5(a)(2) factors listed in Unit III. Once EPA determines that a use of a chemical substance is a significant new use, TSCA section 5(a)(1)(B) requires persons to submit a significant new use notice (SNUN) to EPA at least 90 days before they manufacture or process the chemical substance for that use (15 U.S.C. 2604(a)(1)(B)(i)). TSCA furthermore prohibits such manufacturing or processing from commencing until EPA has conducted a review of the notice, made an appropriate determination on the notice, and taken such actions as are required in association with that determination (15 U.S.C. 2604(a)(1)(B)(ii)). As described in Unit V., the general SNUR provisions are found at 40 CFR part 721, subpart A.

C. Applicability of General Provisions

General provisions for SNURs appear in 40 CFR part 721, subpart A. These provisions describe persons subject to the rule, recordkeeping requirements, exemptions to reporting requirements, and applicability of the rule to uses occurring before the effective date of the final rule. Provisions relating to user fees appear at 40 CFR part 700. According to § 721.1(c), persons subject to these SNURs must comply with the same SNUN requirements and EPA regulatory procedures as submitters of PMNs under TSCA section 5(a)(1)(A). In particular, these requirements include the information submission requirements of TSCA section 5(b) and 5(d)(1), the exemptions authorized by TSCA section 5(h)(1), (h)(2), (h)(3), and (h)(5), and the regulations at 40 CFR part 720. Once EPA receives a SNUN, EPA must either determine that the significant new use is not likely to present an unreasonable risk of injury or take such regulatory action as is associated with an alternative determination before the manufacture or processing for the significant new use can commence. If EPA determines that the significant new use is not likely to present an unreasonable risk, EPA is required under TSCA section 5(g) to make public, and submit for publication in the **Federal Register**, a statement of EPA's findings.

III. Significant New Use Determination

Section 5(a)(2) of TSCA states that EPA's determination that a use of a chemical substance is a significant new use must be made after consideration of all relevant factors, including:

- The projected volume of manufacturing and processing of a chemical substance.
- The extent to which a use changes the type or form of exposure of human beings or the environment to a chemical substance.
- The extent to which a use increases the magnitude and duration of exposure of human beings or the environment to a chemical substance.
- The reasonably anticipated manner and methods of manufacturing, processing, distribution in commerce, and disposal of a chemical substance.

In addition to these factors enumerated in TSCA section 5(a)(2), the statute authorized EPA to consider any other relevant factors.

To determine what would constitute a significant new use for the chemical substances that are the subject of these SNURs, EPA considered relevant information about the toxicity of the chemical substances, likely human exposures and environmental releases associated with possible uses, and the four bulleted TSCA section 5(a)(2) factors listed in this unit.

IV. Substances Subject to This Proposed Rule

EPA is proposing significant new use and recordkeeping requirements for two chemical substances in 40 CFR part 721, subpart E. In this unit, EPA provides the following information for each chemical substance:

- PMN number.
- Chemical name (generic name, if the specific name is claimed as CBI).
- Chemical Abstracts Service (CAS) Registry number (assigned for non-confidential chemical identities).
- Tests recommended by EPA to provide sufficient information to evaluate the chemical substance (see Unit VII. for more information).
- CFR citation assigned in the regulatory text section of this proposed rule.

The regulatory text section of this proposed rule specifies the activities designated as significant new uses. Certain new uses, including production volume limits (*i.e.*, limits on manufacture volume) and other uses designated in this proposed rule, may be claimed as CBI.

PMN Number P–14–321 and P–14–323

Chemical name: Hydrochlorofluoropropane and Hydrochlorofluoropropene (generic).

CAS number: Claimed confidential.

Effective date of TSCA section 5(e) consent order: August 12, 2016.

Basis for TSCA section 5(e) consent order: The PMN states that the generic (non-confidential) use of the substances will be as site-limited, isolated and recycled intermediates. Based on test data on the PMN substances, EPA identified concerns for acute toxicity including lethality to animals. The Order was issued under TSCA section 5(a)(3)(B)(ii)(I) based on a finding that the substance may present an unreasonable risk of injury to human health. To protect against these risks, the consent order requires:

1. Submission of certain toxicity testing on the PMN substances prior to exceeding the time trigger specified in the consent order of the PMN substances.
2. Use of impervious gloves and protective clothing where dermal exposure is reasonably likely for workers.
3. Use of respirators with an APF of 1000, in conjunction with a minimum set of engineering controls to prevent inhalation exposure for workers, or, as an alternative to using respirators, maintain workplace airborne concentrations of the PMN substances at or below a specified New Chemical Exposure Limit (NCEL) of 130 parts per million (ppm) for P–14–321 and 33 parts per billion (ppb) for P–14–323 as an 8-hour time-weighted average, where inhalation exposure is reasonably likely for workers.
4. Use of engineering controls to limit worker exposure and air release of the PMN substances to the environment.
5. Label containers of the PMN substances and provide Safety Data Sheets and worker training.
6. Manufacture, process and use the PMN substances only in an enclosed process.
7. Use of the PMN substances only as chemical intermediates.
8. No predictable or purposeful release of the PMN substances from manufacturing, processing or use into the waters of the United States that result in surface water concentrations exceeding 8 ppb.
9. Prohibition on the distribution of the PMN substances.

The SNUR designates as a "significant new use" the absence of these protective measures.

Recommended testing: EPA has determined that the results of a subacute inhalation toxicity: 28-day study (OECD Test Guideline 412) in three species: Mouse, rat, and rabbit (6 studies total) and a combined repeated dose toxicity study with the reproduction/developmental toxicity screening test (OECD Test Guideline 422) would help characterize the human health effects of the PMN substances. The submitter has agreed to complete this testing by the production limits identified in the consent order.

V. Rationale and Objectives of the Proposed Rule

A. Rationale

During review of the PMNs submitted for the chemical substances that are subject to these SNURs, EPA concluded that regulation was warranted under TSCA section 5(e), pending the development of information sufficient to make reasoned evaluations of the health or environmental effects of the chemical substances. The basis for such findings is outlined in Unit IV. Based on these findings, TSCA section 5(e) consent orders requiring the use of appropriate exposure controls were negotiated with the PMN submitters. The SNUR provisions for these chemical substances are consistent with the provisions of the TSCA section 5(e) consent orders. These SNURs are promulgated pursuant to § 721.160 (see Unit VI.).

B. Objectives

EPA is proposing these SNURs for specific chemical substances which have undergone premanufacture review because the Agency wants to achieve the following objectives with regard to the significant new uses designated in this proposed rule:

- EPA would receive notice of any person's intent to manufacture or process a listed chemical substance for the described significant new use before that activity begins.
- EPA would have an opportunity to review and evaluate data submitted in a SNUN before the notice submitter begins manufacturing or processing a listed chemical substance for the described significant new use.
- EPA would be able to either determine that the prospective manufacture or processing is not likely to present an unreasonable risk, or to take necessary regulatory action associated with any other determination, before the described significant new use of the chemical substance occurs.

Issuance of a SNUR for a chemical substance does not signify that the chemical substance is listed on the TSCA Chemical Substance Inventory (TSCA Inventory). Guidance on how to determine if a chemical substance is on the TSCA Inventory is available on the Internet at *https://www.epa.gov/tsca-inventory.*

VI. Applicability of the Proposed Rule to Uses Occurring Before the Effective Date of the Final Rule

To establish a significant new use, EPA must determine that the use is not ongoing. The chemical substances subject to this proposed rule have undergone premanufacture review. In cases where EPA has not received a notice of commencement (NOC) and the chemical substance has not been added to the TSCA Inventory, no person may commence such activities without first submitting a PMN. Therefore, for chemical substances for which an NOC has not been submitted EPA concludes that the designated significant new uses are not ongoing.

When chemical substances identified in this proposed rule are added to the TSCA Inventory, EPA recognizes that, before the rule is effective, other persons might engage in a use that has been identified as a significant new use. The identities of the two chemical substances subject to this proposed rule have been claimed as confidential and EPA has received no post-PMN *bona fide* submissions (per §§ 720.25 and 721.11). Based on this, the Agency believes that it is highly unlikely that any of the significant new uses described in the regulatory text of this proposed rule are ongoing.

Therefore, EPA designates August 15, 2016 (the date of public release/web posting of this proposal) as the cutoff date for determining whether the new use is ongoing. This designation varies slightly from EPA's past practice of designating the date of **Federal Register** publication as the date for making this determination. The objective of EPA's approach has been to ensure that a person could not defeat a SNUR by initiating a significant new use before the effective date of the final rule. In developing this proposal, EPA has recognized that, given EPA's practice of now posting proposed rules on its Web site a week or more in advance of **Federal Register** publication, this objective could be thwarted even before that publication. Thus, EPA has slightly modified its approach in this rulemaking and plans to follow this modified approach in future significant new use rulemakings.

Persons who begin commercial manufacture or processing of the chemical substances for a significant new use identified as of August 15, 2016 would have to cease any such activity upon the effective date of the final rule. To resume their activities, these persons would have to first comply with all applicable SNUR notification requirements and wait until all TSCA prerequisites for the commencement of manufacture or processing have been satisfied. If such a person met the conditions of advance compliance under § 721.45(h), the person would be considered exempt from the requirements of the SNUR. Consult the **Federal Register** document of April 24, 1990 (55 FR 17376) for a more detailed discussion of the cutoff date for ongoing uses.

VII. Test Data and Other Information

EPA recognizes that TSCA section 5 does not require developing new information (*e.g.*, generating test data) before submission of a SNUN. There is an exception:

1. Development of test data is required where the chemical substance subject to the SNUR is also subject to a test rule, order, or consent agreement under TSCA section 4 (see TSCA section 5(b)(1)).
2. Development of test data may be necessary where the chemical substance has been listed under TSCA section 5(b)(4) (see TSCA section 5(b)(2)).

In the absence of a test rule, order, or consent agreement under TSCA section 4 covering the chemical substance, persons are required only to submit information in their possession or control and to describe any other information known to or reasonably ascertainable by them (see 40 CFR 720.50). However, upon review of PMNs and SNUNs, the Agency has the authority to require appropriate testing. Descriptions of tests are provided for informational purposes. EPA strongly encourages persons, before performing any testing, to consult with the Agency pertaining to protocol selection. To access the OCSPP test guidelines referenced in this document electronically, please go to *http://www.epa.gov/ocspp* and select "Test Guidelines for Pesticides and Toxic Substances."

The recommended tests specified in Unit IV. may not be the only means of addressing the potential risks of the chemical substance. However, submitting a SNUN that does not itself include information sufficient to permit a reasoned evaluation may increase the likelihood that EPA will either respond with a determination that the information available to the Agency is insufficient to permit a reasoned evaluation of the health and environmental effects of the significant new use or, alternatively, that in the absence of sufficient information, the manufacture, processing, distribution in commerce, use, or disposal of the chemical substance may present an unreasonable risk of injury.

SNUN submitters should be aware that EPA will be better able to evaluate SNUNs and define the terms of any potentially necessary controls if the submitter provides detailed information on:

- Human exposure and environmental release that may result from the significant new use of the chemical substances.
- Potential benefits of the chemical substances.
- Information on risks posed by the chemical substances compared to risks posed by potential substitutes.

VIII. SNUN Submissions

EPA recommends that submitters consult with the Agency prior to submitting a SNUN to discuss what information may be useful in evaluating a significant new use. Discussions with the Agency prior to submission can afford ample time to conduct any tests that might be helpful in evaluating risks posed by the substance. According to § 721.1(c), persons submitting a SNUN must comply with the same notification requirements and EPA regulatory procedures as persons submitting a PMN, including submission of test data on health and environmental effects as described in 40 CFR 720.50. SNUNs must be submitted on EPA Form No. 7710–25, generated using e-PMN software, and submitted to the Agency in accordance with the procedures set forth in 40 CFR 720.40 and 721.25. E–PMN software is available electronically at *https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/how-submit-e-pmn.*

IX. Scientific Standards, Evidence, and Available Information

EPA has used scientific information, technical procedures, measures, methods, protocols, methodologies, and models consistent with the risk assessment documents included in the public docket.

The clarity and completeness of the data, assumptions, methods, quality assurance, and analyses employed in EPA's decision are documented, as applicable and to the extent necessary for purposes of this proposed significant new use rule, in Unit II and in the documents noted above. EPA recognizes, based on the available information, that there is variability and uncertainty in whether any particular significant new use would actually present an unreasonable risk. For precisely this reason, it is appropriate to secure a future notice and review process for these uses, at such time as they are known more definitely. The extent to which the various information, procedures, measures, methods, protocols, methodologies or models used in EPA's decision have been subject to independent verification or peer review is adequate to justify their use, collectively, in the record for a significant new use rule.

X. Economic Analysis

EPA has evaluated the potential costs of establishing SNUN requirements for potential manufacturers and processors of the chemical substances subject to this proposed rule, during the development of the direct final rule. EPA's complete economic analysis is available in the docket under docket ID number EPA–HQ–OPPT–2016–0491.

XI. Statutory and Executive Order Reviews

A. Executive Order 12866

This proposed rule would establish SNURs for two chemical substances that were the subject of PMNs. The Office of Management and Budget (OMB) has exempted these types of actions from review under Executive Order 12866, entitled *"Regulatory Planning and Review"* (58 FR 51735, October 4, 1993).

B. Paperwork Reduction Act (PRA)

According to PRA (44 U.S.C. 3501 *et seq.*), an agency may not conduct or sponsor, and a person is not required to respond to a collection of information that requires OMB approval under PRA, unless it has been approved by OMB and displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in title 40 of the CFR, after appearing in the **Federal Register**, are listed in 40 CFR part 9, and included on the related collection instrument or form, if applicable.

The information collection requirements related to this proposed rule have already been approved by OMB pursuant to PRA under OMB control number 2070–0012 (EPA ICR No. 574). This proposed rule would not impose any burden requiring additional OMB approval. If an entity were to submit a SNUN to the Agency, the annual burden is estimated to average between 30 and 170 hours per response. This burden estimate includes the time needed to review instructions, search existing data sources, gather and maintain the data needed, and complete, review, and submit the required SNUN.

Send any comments about the accuracy of the burden estimate, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques, to the Director, Collection Strategies Division, Office of Environmental Information (2822T), Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001. Please remember to include the OMB control number in any correspondence, but do not submit any completed forms to this address.

C. Regulatory Flexibility Act (RFA)

On February 18, 2012, EPA certified pursuant to RFA section 605(b) (5 U.S.C. 601 *et seq.*), that promulgation of a SNUR does not have a significant economic impact on a substantial number of small entities where the following are true:

1. A significant number of SNUNs would not be submitted by small entities in response to the SNUR.
2. The SNUR submitted by any small entity would not cost significantly more than $8,300.

A copy of that certification is available in the docket for this proposed rule.

This proposed rule is within the scope of the February 18, 2012 certification. Based on the Economic Analysis discussed in Unit IX. and EPA's experience promulgating SNURs (discussed in the certification), EPA believes that the following are true:

- A significant number of SNUNs would not be submitted by small entities in response to the SNUR.
- Submission of the SNUN would not cost any small entity significantly more than $8,300.

Therefore, the promulgation of the SNUR would not have a significant economic impact on a substantial number of small entities.

D. Unfunded Mandates Reform Act (UMRA)

Based on EPA's experience with proposing and finalizing SNURs, State, local, and Tribal governments have not been impacted by these rulemakings, and EPA does not have any reasons to believe that any State, local, or Tribal government would be impacted by this proposed rule. As such, EPA has determined that this proposed rule would not impose any enforceable duty, contain any unfunded mandate, or otherwise have any effect on small governments subject to the requirements of UMRA sections 202, 203, 204, or 205 (2 U.S.C. 1501 *et seq.*).

E. Executive Order 13132

This proposed rule would not have a substantial direct effect on States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999).

F. Executive Order 13175

This proposed rule would not have Tribal implications because it is not expected to have substantial direct effects on Indian Tribes. This proposed rule would not significantly nor uniquely affect the communities of Indian Tribal governments, nor would it involve or impose any requirements that affect Indian Tribes. Accordingly, the requirements of Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 2000), do not apply to this proposed rule.

G. Executive Order 13045

This proposed rule is not subject to Executive Order 13045, entitled "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because this is not an economically significant regulatory action as defined by Executive Order 12866, and this proposed rule does not address environmental health or safety risks disproportionately affecting children.

H. Executive Order 13211

This proposed rule is not subject to Executive Order 13211, entitled "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001), because this proposed rule is not expected to affect energy supply, distribution, or use and because this proposed rule is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act (NTTAA)

In addition, since this proposed rule would not involve any technical standards, NTTAA section 12(d) (15 U.S.C. 272 note), would not apply to this proposed rule.

J. Executive Order 12898

This proposed rule does not entail special considerations of environmental justice related issues as delineated by Executive Order 12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (59 FR 7629, February 16, 1994).

List of Subjects in 40 CFR Part 721

Environmental protection, Chemicals, Hazardous substances, Reporting and recordkeeping requirements.

Dated: August 15, 2016.

Maria J. Doa,

Director, Chemical Control Division, Office of Pollution Prevention and Toxics.

Therefore, it is proposed that 40 CFR chapter I be amended as follows:

PART 721—SIGNIFICANT NEW USES OF CHEMICAL SUBSTANCES

■ 1. The authority citation for part 721 continues to read as follows:

Authority: 15 U.S.C. 2604, 2607, and 2625(c).

■ 2. Add § 721.10926 to subpart E to read as follows:

§ 721.10926 Hydrochlorofluoropropane and Hydrochlorofluoropropene (generic).

(a) *Chemical substance and significant new uses subject to reporting.* (1) The chemical substances identified generically as hydrochlorofluoropropane and hydrochlorofluoropropene (generic) (PMNs P–14–321 and P–14–323) are subject to reporting under this section for the significant new uses described in paragraph (a)(2) of this section.

(2) The significant new uses are:

(i) *Protection in the workplace.* Requirements as specified in § 721.63(a)(1), (a)(2)(i), (a)(3), (a)(4), (a)(6)(v), (a)(6)(vi), and (c). When determining which persons are reasonably likely to be exposed as required for § 721.63(a)(4), engineering control measures (*e.g.,* enclosure or confinement of the operation, general and local ventilation) or administrative control measures (*e.g.,* workplace policies and procedures) shall be considered and implemented to prevent exposure, where feasible. The following National Institute for Occupational Safety and Health (NIOSH)-certified respirators with an Assigned Protection Factor (APF) of at least 1000 meet the requirements of § 721.63(a)(4):

(A) Any NIOSH-certified powered air purifying full facepiece respirator equipped with appropriate gas/vapor (acid gas, organic vapor, or substance specific) cartridges.

(B) Any NIOSH-certified powered air-purifying respirator equipped with a hood or helmet and appropriate gas/vapor (acid gas, organic vapor, or substance specific) cartridges with evidence demonstrating protection level of 1,000 or greater. (Note: OSHA has assigned APFs of 1000 for certain types of hoods and helmets with powered air purifying respirators (PAPRs) or supplied air respirators (SARs) where the manufacturer can demonstrate adequate air flows to maintain positive pressure inside the hood or helmet in normal working conditions. However, the employer must have evidence provided by the respirator manufacturer that the testing of these respirators demonstrates performance at a level of protection of 1,000 or greater to receive an APF of 1,000. This level of performance can best be demonstrated by performing a Workplace Protection Factor (WPF) or Simulated Workplace Protection Factor (SWPF) study or equivalent testing. Without testing data that demonstrates a level of protection of 1,000 or greater, all PAPRs and SARs with helmets/hoods are to be treated as loose-fitting facepiece respirators, and receive an APF of 25.)

(C) Any NIOSH-certified continuous flow supplied-air respirator equipped with a full facepiece.

(D) Any NIOSH-certified continuous flow supplied-air respirator equipped with a hood or helmet with evidence demonstrating protection level of 1,000 or greater. (See Note under (II), above)

(E) Any NIOSH-certified pressure-demand or other positive pressure mode supplied-air respirator equipped with a full facepiece.

(1) As an alternative to the respiratory requirements listed here, a manufacturer or processor may choose to follow the New Chemical Exposure Limit (NCEL) provisions listed in the TSCA section 5(e) consent order for this substance. The NCEL is 130 parts per million for P–14–321 and 33 parts per billion for P–14–323 as an 8-hour time weighted average (TWA) verified by actual monitoring data.

(ii) *Hazard communication program.* Requirements as specified in § 721.72(a), (b), (c), (d), (f), (g)(1)(i), (g)(1)(fatal if inhaled), (g)(2)(ii), (g)(2)(iv), (g)(2)(v), and (g)(2)(do not release to water).

(ii) *Industrial, commercial, and consumer activities.* Requirements as specified in § 721.80(a) and (g). It is a significant new use to manufacture, process, or use the PMN substances without the engineering controls described in the consent order to prevent worker and environmental exposures. It is a significant new use to manufacture the PMN substances for more than one year.

(iii) *Release to water.* Requirements as specified in § 721.90(a)(4), (b)(4), and (c)(4) (N=8).

(b) *Specific requirements.* The provisions of subpart A of this part apply to this section except as modified by this paragraph.

(1) *Recordkeeping.* Recordkeeping requirements as specified in § 721.125 (a), (b), (c), (d), (e), (f), (g), (h), (i), and (k) are applicable to manufacturers and processors of this substance.

(2) *Limitations or revocation of certain notification requirements.* The provisions of § 721.185 apply to this section.

[FR Doc. 2016–20310 Filed 8–23–16; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 64

[CG Docket Nos. 10–51 and 03–123; DA 16–893]

Structure and Practices of the Video Relay Service Program

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Consumer and Governmental Affairs Bureau (CGB or Bureau) of the Federal Communications Commission (FCC or Commission), pursuant to a delegation of authority, proposes to incorporate into the Commission's rules the Video Relay Service (VRS) interoperability and portability standards developed by the VRS Task Group of the Session Initiation Protocol (SIP) Forum and a successor group, the Relay User Equipment (RUE) Forum.

DATES: Comments are due on or before September 14, 2016.

ADDRESSES: You may submit comments, identified by CG Docket Nos. 10–51 and 03–123, by any of the following methods:

- *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the Commission's Electronic Comment Filing System (ECFS): *http://apps.fcc.gov/ecfs//.* Filers should follow the instructions provided on the Commission's Web site for submitting comments. For ECFS filers, in completing the transmittal screens, filers should include their full name, U.S. Postal Service mailing address, and CG Docket Nos. 10–51 and 03–123.
- *Paper Filers:* Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St. SW., Room TW–A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of *before* entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street SW., Washington, DC 20554.

FOR FURTHER INFORMATION CONTACT: Eliot Greenwald, Consumer and Governmental Affairs Bureau, at phone: (202) 418–2235 or email: *Eliot.Greenwald@fcc.gov,* or Robert Aldrich, Consumer and Governmental Affairs Bureau, at phone (202) 418–0996 or email: *Robert.Aldrich@fcc.gov.*

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Further Notice of Proposed Rulemaking (*Further Notice*), document DA 16–893, adopted on August 4, 2016, and released on August 4, 2016. The full text of this document is available for public inspection and copying via ECFS, and during regular business hours at the FCC Reference Information Center, Portals II, 445 12th Street SW., Room CY–A257, Washington, DC 20554. This document can also be downloaded in Word or Portable Document Format (PDF) at: *https://www.fcc.gov/general/disability-rights-office-headlines.* The proceeding initiated by the Further Notice shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules. 47 CFR 1.1200 *et seq.* Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with 47 CFR 1.1206(b). In proceedings governed by 47 CFR 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.,* .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an email to *fcc504@fcc.gov* or call the Consumer and Governmental Affairs Bureau at (202) 418–0530 (voice), (844) 432–2275 (videophone), or (202) 418–0432 (TTY).

Initial Paperwork Reduction Act of 1995 Analysis

The Further Notice does not contain proposed information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104–13. In addition, therefore, it does not contain any proposed information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, *see* 44 U.S.C. 3506(c)(4).

Synopsis

1. In 2013, the Commission amended its rules to improve the effectiveness of its interoperability and portability rules for video relay service (VRS), in order to improve functional equivalence and VRS availability for consumers, ease of compliance by providers, and overall efficiency in the operation of the

telecommunications (TRS) program. The Commission directed Commission staff to support and participate in the ongoing Session Initiation Protocol (SIP) Forum's VRS Task Group process in order to ensure the timely development of such consensus standards. *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals With Hearing and Speech Disabilities,* published at 78 FR 40582, July 5, 2013 (*VRS Reform Order*).

2. The Further Notice, issued by CGB pursuant to a delegation of authority in the *VRS Reform Order,* proposes to incorporate by reference into the Commission's VRS interoperability rule the interoperability and portability standards produced by the VRS Task Group of the SIP Forum and a successor group, the Relay User Equipment (RUE) Forum, along with a process that will readily enable revisions to this rule to reflect future amendments or changes in these standards. In addition, this document proposes guidance on implementation of the standards, including the need for a transition period for existing VRS access technologies to achieve interoperability and portability.

3. Since 2006, the Commission has required VRS providers to (i) allow VRS users to make and receive calls through any VRS provider, and to choose a different default provider, without changing the VRS access technology they use to place calls, and (ii) ensure that VRS users can make point-to-point calls to all other VRS users, irrespective of the default provider of the calling and called party. Providers also must ensure that videophone equipment that they distribute retains certain features when a user ports his or her ten-digit VRS number to a new default provider. 47 CFR 64.611(e); *VRS Reform Order.*

4. In order to improve the effectiveness of these interoperability and portability requirements, the Commission delegated "to the Chief of CGB, after consultation with the CTO [Chief Technology Officer] and the Chief of OET [Office of Engineering and Technology], the authority to conduct rulemaking proceedings to incorporate into the Commission's rules by reference any interoperability and portability standards developed under the auspices of the SIP Forum, now or in future, or such other voluntary, consensus standard organization as may be formed to address these issues." *VRS Reform Order.* The *VRS Reform Order* further provided: "Recognizing that the scope of the SIP Forum VRS Task Group charter extends beyond the Commission's current mandatory minimum standards, the Commission also delegates to Chief of CGB, after consultation with the CTO and the Chief of OET, the authority to conduct rulemaking proceedings to incorporate into the Commission's rules by reference as new or updated mandatory minimum standards any standards or recommended standards developed by the SIP Forum (or such other voluntary, consensus standard organization as may be formed to address these issues) that the Chief of CGB finds will advance the statutory functional equivalency mandate or improve the availability of TRS, in the most efficient manner. In conducting such rulemakings, the Chief of CGB shall provide guidance on implementation, including the need for a transition period for existing VRS access technologies, complaint resolution, or other actions necessary to ensure full interoperability and portability."

5. In August 2015, the SIP Forum published the Video Relay Service (VRS) Provider Interoperability Profile (VRS Provider Interoperability Profile), a consensus document developed by the SIP Forum's VRS Task Group. The VRS Provider Interoperability Profile provides technical specifications for the interface between VRS providers and the interface between a VRS provider and the TRS Numbering Directory. In July 2016, the Relay User Equipment Forum (RUE Forum) published a second consensus document, the Interoperability Profile for Relay User Equipment (RUE Profile) on the Internet Engineering Task Force (IETF) Web site. The RUE Profile provides technical specifications that define a standard interface between a relay user's equipment and the services offered by relay service providers.

6. The Bureau tentatively concludes that the VRS Provider Interoperability Profile and the RUE Profile will effectively meet the Commission's goals of ensuring interoperability and portability, as required by the *VRS Reform Order.* Specifically, these standards will enable a VRS user to place and receive calls through any VRS provider and make point-to-point calls to all other VRS users, irrespective of the default provider of the parties to the call, and without the caller having to change the VRS access technology used to make such calls. Additionally, as required by the *VRS Reform Order,* these standards will support a standard data interchange format for exporting and importing private data contained in a user's personal contacts list (also referred to as an address book) and the user's speed dial list between the VRS user's access technology and the access technology of other VRS providers. In these various ways, these standards will "advance the statutory functional equivalency mandate [and] improve the availability of TRS, in the most efficient manner," in accordance with the *VRS Reform Order.* The Bureau further notes that all current VRS providers participated in the process leading to adoption of the standards, and that all providers appear to have reached a consensus on these standards. For all of these reasons, the Bureau tentatively concludes that these standards meet the Commission's objective of facilitating interoperability and portability for VRS, and should be incorporated by reference into the Commission's rules. The Bureau seeks comment on this tentative conclusion and its rationale. The Bureau also seeks comment on whether any modified version of the standards that results from the continued work of the RUE Forum, which is published subsequent to the Commission's release of the Further Notice and during the pendency of this proceeding, should be adopted in lieu of the versions of the standards discussed above.

7. The Bureau also proposes to follow, in the future, a procedure that permits amendments or changes to the standards to be incorporated into the Commission's rules in a timely and efficient manner. The Bureau believes that a voluntary, consensus standards process that results in amendments or changes to the standards will, as is the case for the standards proposed for incorporation herein, allow for widespread participation by the affected parties, and in particular VRS providers. In the event of such amendments or changes, the Bureau will issue a public notice seeking comment on such modifications, followed by an order incorporating into the VRS rules amendments or changes by reference if justified based on the resulting record. When such revised standards are completed and accepted by the Bureau, a second public notice will be issued containing information on how to access the modified standards and establishing an implementation schedule. To facilitate ready access to such standards, the Bureau further proposes that the Commission make them available to the public online. The Bureau believes that this process will allow interested parties to have the opportunity to participate in the standards-setting process, comment on the inclusion of such standards in the Commission's rules, and receive notice about the implementation of any amendments or changes to the standards. The Bureau seeks comment

on this approach and on any alternatives.

8. As to the timing of the implementation of the recently developed standards, the Bureau believes that insofar as all current VRS providers participated in developing these standards and had an opportunity to debate the various technical issues over a period of several years, as a practical matter, all providers have become familiar with the content of the standards, have had ample opportunity to incorporate the standards into their software development processes, and have had sufficient opportunity to familiarize their suppliers with any necessary design changes. The Bureau therefore proposes that the rule amendment incorporating the standards into 47 CFR 64.621 shall become effective 60 days after publication in the **Federal Register** of the amended rule. The Bureau seeks comment on this proposed implementation schedule. To the extent that any commenter seeks a later effective date, the Bureau requests that such commenter describe the specific products or features and functions for which a later effective date is needed and the reasons why compliance is not achievable at an earlier date.

9. As the Commission contemplated in the *VRS Reform Order,* once incorporated into the Commission's rules, compliance with the standards "shall be a prerequisite for compensation from the Fund. No VRS provider shall be compensated for minutes of use generated by non-standards compliant VRS access technologies or otherwise generated in a manner inconsistent with the Commission's rules. If a provider cannot reliably separate minutes of use generated through standards compliant VRS access technologies from those generated through non-standards compliant VRS access technologies, the provider will not receive compensation for any of the minutes." *VRS Reform Order.*

10. The Office of Federal Register (OFR) recently revised its regulations to require that agencies must discuss in the preamble of a proposed rule ways that the materials the agency proposes to incorporate by reference are reasonably available to interested parties or how it worked to make those materials reasonably available to interested parties. In addition, the preamble of the proposed rule must summarize the material. 1 CFR 51.5(a). In accordance with OFR's requirements, the discussion in the following two paragraphs summarizes and indicates the availability of the VRS Provider Interoperability Profile and the RUE Profile.

11. The U.S. Video Relay Service (VRS) Provider Interoperability Profile, Version 15, SIP Forum Document Number: VRS U.S. Providers Profile TWG–6–0.15 (Sept. 23, 2015) (VRS Provider Interoperability Profile), is available from SIP Forum LLC, 733 Turnpike Street, Suite 192, North Andover, MA 01845 USA, (203) 829–6307, at *http://www.sipforum.org/component/option,com_docman/task,cat_view/gid,160/Itemid,75/.* The Provider Interoperability Profile provides technical specifications for the interface between VRS providers and the interface between a VRS provider and the TRS Numbering Directory.

12. The Interoperability Profile for Relay User Equipment, draft-vrs-rue-dispatch-00 (July 20, 2016) (RUE Profile), is available from IETF Secretariat, 5177 Brandin Court, Fremont, CA 94538, 510–492–4080, at *https://www.ietf.org/id/draft-vrs-rue-dispatch-00.txt.* The RUE Profile provides technical specifications that define a standard interface between a relay user's equipment and the services offered by relay service providers.

Initial Regulatory Flexibility Analysis

13. As required by the Regulatory Flexibility Act (RFA), the Bureau has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in the Further Notice. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments specified in the Further Notice.

14. *Need For, and Objectives of, the Proposed Rules.* In the *VRS Reform Order,* the Commission strongly encouraged the continuation of efforts by the SIP Forum's VRS Task Group to develop voluntary, consensus standards to facilitate interoperability and portability of VRS and directed Commission staff to support and participate in the SIP Forum process. The SIP Forum and a successor group, the RUE Forum, have now produced interoperability and portability standards, making it possible to achieve the improvements sought in the *VRS Reform Order.* The Further Notice proposes to incorporate those interoperability and portability standards by reference into 47 CFR 64.621, the Commission's VRS interoperability rule, along with guidance on implementation, including the need for a transition period for existing VRS access technologies to achieve interoperability and portability. In addition, the Further Notice proposes a process that will readily enable revisions to this rule to reflect future amendments or changes in these standards by issuing a public notice seeking comment on such modifications, followed by an order incorporating into the VRS rules amendments or changes by reference if justified based on the resulting record, after which a second public notice will be issued containing information on how to access the modified standards online and establishing an implementation schedule.

15. *Legal Basis.* The legal basis for any action that may be taken pursuant to the Further Notice is contained in 47 U.S.C. 151, 152, 154(i), 154(j), 225, 303(r).

16. *Types of Small Entities to Which the Proposed Rules May Apply.* All Other Telecommunications.

17. *Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements.* If the Commission were to incorporate the SIP Forum and RUE Forum standards by reference into the Commission's VRS interoperability rule and provide guidance on implementation, VRS providers, including small entities, would need to take steps to comply with such standards.

18. *Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered.* In general, alternatives to proposed rules are discussed only when those rules pose a significant adverse economic impact on small entities. In this context, however, the proposed rules generally confer benefits. In particular, interoperability requirements benefit the smaller providers because consumers find the services of smaller providers to be more attractive when these services are interoperable than when they are not interoperable. These benefits outweigh any burdens associated with compliance. Moreover, because all of the VRS providers participated in the discussions associated with the development of the standards, the Commission believes that these standards are acceptable to all VRS providers, including small entities. Lastly, the Further Notice seeks comment on the proposed implementation schedule to ensure that such implementation schedule is achievable.

19. *Federal Rules that May Duplicate, Overlap, or Conflict with Proposed Rules.* None.

List of Subjects in 47 CFR Part 64

Telecommunications relay services, Individuals with disabilities.

Federal Communications Commission.

Karen Peltz Strauss,

Deputy Chief, Consumer and Governmental Affairs Bureau.

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR part 64 as follows:

PART 64—MISCELLANEOUS RULES RELATING TO COMMON CARRIERS

■ 1. The authority citation for part 64 continues to read as follows:

Authority: 47 U.S.C. 154, 254(k); 403(b)(2)(B), (c), Public Law 104–104, 110 Stat. 56. Interpret or apply 47 U.S.C. 201, 218, 222, 225, 226, 227, 228, 254(k), 616, and 620, and the Middle Class Tax Relief and Job Creation Act of 2012, Public Law 112–96, unless otherwise noted.

■ 2. Amend § 64.621 by revising paragraph (b) to read as follows:

§ 64.621 Interoperability and portability.

* * * * *

(b) *Technical Standard for Interoperability and Portability.*

(1) VRS providers shall ensure that their provision of VRS and video communications, including their access technology, meets the requirements of the U.S. Video Relay Service (VRS) Provider Interoperability Profile Version 15, SIP Forum Document Number: VRS U.S. Providers Profile TWG–6–0.15 (Sept. 23, 2015) (VRS Provider Interoperability Profile), *http://www.sipforum.org/component/option,com_docman/task,cat_view/gid,160/Itemid,75/,* and the Interoperability Profile for Relay User Equipment (RUE Profile), draft-vrs-rue-dispatch-00 (July 20, 2016), *https://www.ietf.org/id/draft-vrs-rue-dispatch-00.txt.*

(2) This incorporation by reference of the VRS Provider Interoperability Profile and the RUE Profile was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the VRS Provider Interoperability Profile may be obtained from SIP Forum LLC, 733 Turnpike Street, Suite 192, North Andover, MA 01845 U.S.A., (203) 829–6307, at *http://www.sipforum.org/component/option,com_docman/task,cat_view/gid,160/Itemid,75/.* Copies of the RUE Profile may be obtained from IETF Secretariat, 5177 Brandin Court, Fremont, CA 94538, 510–492–4080, at *https://www.ietf.org/id/draft-vrs-rue-dispatch-00.txt.* Copies of these publications also may be inspected during normal business hours at the following locations: Consumer and Governmental Affairs Bureau, Reference Information Center, Federal Communications Commission, 445 12th Street SW., Washington, DC 20554; and the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

[FR Doc. 2016–19845 Filed 8–23–16; 8:45 am]

BILLING CODE 6712–01–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 216

[Docket No. 080302361–6677–01]

RIN 0648–AU02

Protective Regulations for Hawaiian Spinner Dolphins Under the Marine Mammal Protection Act

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: We, the National Marine Fisheries Service (NMFS), propose regulations under the Marine Mammal Protection Act (MMPA) to prohibit swimming with and approaching a Hawaiian spinner dolphin within 50 yards (45.7 m) (for persons, vessels, and objects), including approach by interception. These proposed regulatory measures are intended to prevent take of Hawaiian spinner dolphins from occurring in marine areas where viewing pressures are most prevalent; prohibitions would apply in waters within 2 nautical miles (nm; 3.7 km) of the Hawaiian Islands and in the waters between the islands of Lanai, Maui, and Kahoolawe. This proposed rule to establish 50-yard swim-with and approach regulations would help ensure public compliance by providing clear notice of prohibited conduct that results in take, including harassment and disturbance.

Although unauthorized take of marine mammals, including harassment of spinner dolphins, already is and continues to be prohibited under the MMPA throughout their range, the purpose of this regulation is to identify and prohibit specific human activities that result in take (including harassment) of spinner dolphins, and thus reduce disturbance and disruption of important Hawaiian spinner dolphin behaviors in areas where human-dolphin interactions are most likely to occur. These proposed regulations would reduce take of Hawaiian spinner dolphins and the impact of human viewing and interaction on these animals in the Main Hawaiian Islands (MHI). We developed this proposed rule after considering comments submitted in response to an Advance Notice of Proposed Rulemaking (ANPR), as well as information received during the public scoping period for the Draft Environmental Impact Statement (DEIS), from community meetings, and from a dedicated scientific research project.

Although not currently part of this proposal, we are also considering whether additional management measures may be necessary and appropriate to protect Hawaiian spinner dolphins from take, especially in essential daytime habitats that are regularly targeted by humans for dolphin-directed activities. Accordingly, we are soliciting public comment on the proposed swim-with and approach regulations, as well as alternative management options discussed in this rule and in detail in the DEIS.

DATES: Comments must be received no later than 5 p.m. on October 23, 2016.

Public meetings will provide the public with an opportunity to provide comments on any portion of the proposed rule or DEIS. These meetings are scheduled for:

September 7, 2016, 5:30–9:30 p.m. at Konawaena High School Cafeteria, 81–1043 Konawaena School Rd., Kealakekua, HI 96750;

September 8, 2016, 5:30–9:30 p.m. at Kealakehe High School Cafeteria, 74–5000 Puohulihuli St., Kailua Kona, HI 96740;

September 21, 2016, 5:30–9:00 p.m. at Kauai High School Cafeteria, 3577 Lala Rd., Lihue, HI 96766;

September 22, 2016, 5:30–9:00 p.m. at the Hawaiian Islands Humpback Whale National Marine Sanctuary Visitor Center, 726 South Kihei Rd., Kihei, HI 96753;

September 27, 2016, 5:30–9:30 p.m. at Roosevelt High School Dining Hall, 1120 Nehoa Street, Honolulu, HI 96822; and

September 28, 2016, 5:30–9:30 p.m. at Waianae High School Cafeteria, 85–251 Farrington Hwy., Waianae, HI 96792.

ADDRESSES: You may submit comments, information, or data on this document, identified by NOAA–2005–0226, and on the DEIS by either of the following methods:

Electronic Submission: Submit all electronic comments via the Federal eRulemaking Portal. Go to *www.regulations.gov/#!docketDetail;D=NOAA-2005-0226,* click the "Comment Now!" icon, complete the required fields, and enter or attach your comments.

Mail: Submit written comments to Susan Pultz, Chief, Conservation Planning and Rulemaking Branch, Protected Resources Division, National Marine Fisheries Service, Pacific Islands Regional Office, 1845 Wasp Blvd., Bldg. 176, Honolulu, HI 96818, Attn: Hawaiian Spinner Dolphin Proposed Rule.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on *www.regulations.gov* without change. All personal identifying information (*e.g.,* name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. We will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous).

The Draft Environmental Impact Statement (DEIS) and references can be found online at *http://www.fpir.noaa.gov/PRD/prd_spinner_EIS.html.* Additionally, copies of the DEIS are available in print at the following libraries:

Hilo Library, 300 Waianuenue Ave., Hilo, HI 96720;

Kailua-Kona Library, 75–138 Hualalai Rd., Kailua Kona, HI 96740;

Kealakekua Library, 81–6619 Mamalahoa Hwy., Kealakekua, HI 96750;

Pahoa Library, 15–3070 Pahoa-Kalapana Rd., Pahoa, HI 96778;

Kihei Library, 35 Waimahaihai St., Kihei, HI 96753;

Lahaina Library, 680 Wharf St., Lahaina, HI 96761;

Lanai Library, 555 Fraser Ave., Lanai City, HI 96763;

Hawaii State Library, 478 S. King St., Honolulu, HI 96813;

Molokai Public Library, 15 Ala Malama, Kaunakakai, HI 96748;

Waianae Library, 85–625 Farrington Hwy., Waianae, HI 96792; and

Lihue Library, 4344 Hardy St., Lihue, HI 96766; or upon request from the Conservation Planning and Rulemaking Branch Chief (see **ADDRESSES**).

FOR FURTHER INFORMATION CONTACT: Susan Pultz, NMFS, Pacific Islands Region, Chief, Conservation Planning and Rulemaking Branch, 808–725–5150; or Trevor Spradlin, NMFS, Office of Protected Resources, Acting Chief, Marine Mammal and Sea Turtle Conservation Division, 301–427–8402.

SUPPLEMENTARY INFORMATION

Background

Viewing wild marine mammals in Hawaii has been a popular recreational activity for both tourists and residents over the past several decades. Historically, most marine mammal viewing focused on humpback whales (*Megaptera novaeangliae*) during the winter months when the whales migrate from their feeding grounds off the coast of Alaska to Hawaii's warm and protected waters to breed and calve. However, increased viewing has focused on small cetaceans, with a particular emphasis on Hawaiian spinner dolphins (*Stenella longirostris*), which can be predictably found close to shore in shallow waters throughout the MHI.

The number of commercial operators engaged in wild dolphin viewing has grown dramatically in Hawaii in recent years (O'Connor 2009), putting new pressures on easily accessible groups of resting Hawaiian spinner dolphins. In addition, a number of residents and visitors venture on their own, independent of commercial operators, to view and interact with spinner dolphins. The expectation for close interactions with wild dolphins has been encouraged by some operators and various media outlets, which routinely contradict established wildlife viewing guidelines by promoting close vessel or in-water encounters with the dolphins.

We have received many complaints that spinner dolphins are being routinely disturbed by people attempting to closely approach and interact with the dolphins by boat or other watercraft (*e.g.,* kayaks), or in the water (*e.g.,* snorkel or "swim-with-wild-dolphins" activities). In addition, concerns over human-dolphin interactions have been expressed by officials from the Hawaii Department of Land and Natural Resources (DLNR) and the U.S. Marine Mammal Commission (MMC), as well as various members of the public, including representatives of the Native Hawaiian community, scientific researchers, wildlife conservation organizations, public display organizations, and some commercial tour operators.

In 2010, we recognized five island-associated stocks and one pelagic stock of Hawaiian spinner dolphins in our annual Stock Assessment Report, identifying genetic distinctions and site fidelity differences as reasons to separately manage stocks found in waters surrounding the Hawaiian Islands (Carretta *et al.* 2010). Three of the five island-associated stocks (the Kauai/Niihau stock, Oahu/4 Islands (*i.e.,* Maui County) stock, and Hawaii Island stock) are found near the MHI and are considered resident stocks. These three stocks reside in waters surrounding their namesake islands out to approximately 10 nm (18.5 km) (Hill *et al.* 2010), and population estimates for each stock are relatively small. Recent research indicates that the Hawaii Island stock, which is thought to be the largest stock, has an estimated 631 individuals (Coefficient of Variation (CV) = 0.09) (Tyne *et al.* 2014, Carretta *et al.* 2016). Data for other stocks in the MHI is limited; however, using the best available information, the Kauai/Niihau and Oahu/4 Islands stocks are estimated to be around 601 (CV = 0.20) and 355 (CV = 0.09) individuals, respectively (Carretta *et al.* 2016).

Island-associated spinner dolphins, such as those found in the MHI, have complex social structures and behavioral patterns linked to specific habitats that support their high energetic demands. The rigid, cyclical, and patterned behavior of a Hawaiian spinner dolphin's day is well documented from decades of scientific research on spinner dolphins off the Kona coast on the island of Hawaii (Norris and Dohl 1980, Norris *et al.* 1994). The daily pattern of Hawaiian spinner dolphins has been characterized as "working the night shift," because the energetically demanding task of foraging is accomplished nightly when spinner dolphins move offshore in large groups to feed. Spinner dolphins feed on fish, shrimp, and squid found in the mesopelagic boundary community, part of the pelagic zone that extends from a depth of 200 to 1,000 m (~660 to 3,300 feet) below the ocean surface. Spinner dolphins maximize their foraging time by actively moving with, or tracking, the horizontal migration of the mesopelagic boundary community throughout the night, as it moves inshore until midnight and then offshore around sunrise (Benoit-Bird and Au 2003). Spinner dolphins are acoustically very active during foraging activities (Norris *et al.* 1994), working cooperatively in large groups using coordinated movements to maximize foraging potential (Benoit-Bird 2004).

During the day, spinner dolphins return in smaller groups to areas closer to shore to socialize, nurture their young, and rest in preparation for nightly foraging (Norris *et al.* 1994). These smaller groups visit specific habitats that are located along the coastlines of the MHI. These preferred daytime habitats of spinner dolphins are areas that provide space with optimal environmental conditions for resting, socializing, and nurturing young, and are referred to hereafter as "essential daytime habitats." Spinner dolphins' essential daytime habitats are located close to offshore feeding areas, which minimizes the energetic cost of nightly travel to these areas (Norris *et al.* 1994, Thorne *et al.* 2012). Additionally, essential daytime habitats have large patches of sand bottom habitat, which increases the dolphins' ability to visually (instead of acoustically) detect predators while resting, and thus minimizes the energetic costs of vigilance (Norris *et al.* 1994). Throughout the day, spinner dolphins take advantage of the physical characteristics of essential daytime habitats to engage in specific patterned resting behaviors to recuperate between foraging bouts. The physical characteristics of these essential daytime habitats, combined with specific patterned resting behaviors, play an important role in supporting the dolphins' activity and energetic budgets.

Essential daytime habitats have been targeted by commercial operators and individuals interested in viewing or interacting with Hawaiian spinner dolphins because encounters with dolphins in these areas are virtually guaranteed. At some locations, up to 13 tour boats have been observed jockeying for position on a single dolphin group, with up to 60 snorkelers in the water (Heenehan *et al.* 2014). Apart from commercial tour operations, people also swim, kayak, or paddle into essential daytime habitats to seek interactions with the dolphins (Sepez 2006). In addition, organized retreats centered on dolphin encounters, dolphin-assisted therapy, and dolphin-associated spiritual practices have flourished in certain areas, further increasing the intensity of dolphin-directed activities in nearshore areas and especially within essential daytime habitats (Sepez 2006).

There is a growing body of scientific evidence documenting the effects of dolphin-directed activities on spinner dolphins, especially activities that involve close approaches by humans. Peer-reviewed scientific literature documents disturbance of individual spinner dolphins as well as changes to spinner dolphin group behavioral patterns. Individual dolphin responses to these activities vary, and in some cases may not be apparent to an observer (*e.g.,* elevated heart rates or increased watchfulness). However, discernable responses may include aerial displays when closely approached by vessels and swimmers (Forest 2001, Courbis and Timmel 2008); avoidance behaviors, including moving around and away from swimmers and vessels, or leaving the area in response to human pursuit (Ostman-Lind *et al.* 2004, Courbis 2004, Courbis and Timmel 2008); and aggressive behaviors directed at people, including charging or threat displays (Norris *et al.* 1985, Norris *et al.* 1994).

Effects have been documented in the form of changes over time to spinner dolphins' behavioral patterns in essential daytime habitats, where spinner dolphins' behavioral patterns are easily observed. Courbis and Timmel (2008) reported differences in peak aerial activity throughout the day in comparison with earlier studies (Forrest 2001) and noted that dolphins may have reduced aerial behavior when entering and exiting bays to avoid human notice and approaches. Timmel *et al.* (2008) noted the dolphins' direction of travel altered more frequently as the number of swimmers and/or vessels near to them increased. Symons (2013) found that spinner dolphins are less likely to rest when swimmers are present within 150 m. Numerous studies report changes in dolphin residence time within essential daytime habitats compared to earlier studies (Courbis 2004, Courbis and Timmel 2008, Ostman-Lind 2007, Forest 2001). In addition, human activities within essential daytime habitats may be affecting where spinner dolphins engage in their daytime behaviors within these areas. Courbis and Timmel (2008) reported changes in the location of resting spots within Kealakekua Bay from previous studies by Doty (1968) and Norris and Dohl (1980), and warned that changes in locations within the bay could be a precursor to abandonment of the bay with future increases in traffic.

Hawaiian spinner dolphin studies off the island of Oahu also demonstrate the effects of swimmers on dolphins' daily resting behavioral patterns. As the number of swimmers increased in an essential daytime habitat off the west coast of Oahu, the dolphins departed the area at earlier times during the day, possibly indicating reduced rest periods in response to swimmer presence (Danil *et al.* 2005). Additionally, Danil *et al.* (2005) noted that on several occasions, smaller spinner dolphin groups (<25 animals) refrained from entering an essential daytime habitat when swimmer presence was high, suggesting that the observed spinner dolphin rest patterns were altered in order to accommodate and adapt to the swimmers' occurrence. The authors predicted that swimmer presence keeps the dolphins in a constant state of alertness and vigilance, and that delayed diving behavior (in the morning during swimmers' presence) may indicate a diminished quality of rest (Danil *et al.* 2005).

When marine mammals respond to disturbance events, they incur a cost in the form of the energy expended to respond as well as the lost opportunity to engage in natural fitness-enhancing behavior. For example, spinner dolphins disturbed during rest may engage in avoidance or distress behaviors, which require energy, and disturbance detracts from the dolphins' abilities to recuperate from energetically demanding behaviors such as foraging, transiting to and from offshore foraging grounds, and nurturing their young. In this example, the lack of consistent, undisturbed resting periods can reduce the amount of energy available to forage and care for young.

The predictable patterns of MHI resident spinner dolphins' nearshore distribution and daytime behaviors result in concentrated daily viewing and interaction pressure on individual dolphins and groups over extended periods of time. In other small cetacean populations, chronic disturbance to natural behavioral patterns has been linked to biologically significant impacts such as habitat abandonment and reduced female reproductive success (Bejder 2005; Bejder *et al.* 2006a, 2006b; Lusseau and Bejder 2007). Similarly, over time, chronic disturbance to the MHI's resident spinner dolphins could ultimately lead to habitat displacement and/or long term impacts to their individual fitness. These types of impacts may be amplified in resident, closed or isolated populations (local populations with barriers to gene flow) (Bejder 2005) because the impacts to multiple individuals' health and fitness are quickly reflected in the overall fitness of the population. Accordingly, the small resident spinner dolphin populations of the MHI may be more vulnerable to negative impacts from human disturbance.

Disturbances to dolphins' daily behavioral patterns may result in "take," as defined and prohibited under the MMPA and its implementing regulations, and the chronic nature of these problems in Hawaii and observed changes to spinner dolphin behavioral patterns over time are a cause for concern.

Current MMPA Prohibitions and NMFS Guidelines and Regulations

Under section 102 of the MMPA, 16 U.S.C. 1361 *et seq.,* it is unlawful for any person, vessel, or other conveyance to "take" any marine mammal in waters under the jurisdiction of the United States (16 U.S.C. 1372). The prohibition against take includes acts that "harass" marine mammals (16 U.S.C. 1362(13)). Harassment means any act of pursuit, torment, or annoyance which has the *potential to injure* a marine mammal in the wild (Level A Harassment), or has the *potential to disturb* a marine mammal in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B Harassment) (16 U.S.C. 1362(18); *see also* 50 CFR 216.3).

In addition, NMFS' regulations implementing the MMPA further define the term "take" to include "the negligent or intentional operation of an aircraft or vessel, or the doing of any other negligent or intentional act which results in disturbing or molesting a marine mammal; and feeding or attempting to feed a marine mammal in the wild" (50 CFR 216.3).

Section 112 of the MMPA authorizes NOAA to implement regulations that are "necessary and appropriate to carry out the purpose" of the MMPA (16 U.S.C. 1382).

To date, NMFS has developed specific approach distance regulations for certain species of marine mammals listed under the Endangered Species Act (ESA) (16 U.S.C. 1531 *et seq.*). Each rule was based on the biology of the marine mammals and the best available scientific information on the nature of the threats. Examples of these types of regulations include a 100-yard (91.4 m) approach limit for humpback whales in Hawaii (60 FR 3775; January 19, 1995); a 100-yard approach limit for humpback whales in Alaska, which includes a speed restriction in the vicinity of the whale (66 FR 29502; May 31, 2001); a 500-yard (457.2 m) approach limit for North Atlantic right whales (62 FR 6729; February 13, 1997); size-specific vessel speed restrictions within specific areas in waters off the U.S. East Coast to protect North Atlantic right whales (73 FR 60173; October 10, 2008); and a 200-yard (182.9 m) approach limit for killer whales with prohibitions against vessels intercepting a killer whale or positioning the vessel in its path in the inland waters of Washington State (76 FR 20870; April 14, 2011).

In addition to the specific ESA regulations mentioned above, NMFS has developed guidelines for conducting responsible marine wildlife viewing to help the public avoid causing any take (harassment or disturbance) of protected wildlife species (*http://www.nmfs.noaa.gov/pr/pdfs/education/viewing_wildlife.pdf*); these guidelines have been available since 2004. On human interactions with marine mammals in the wild, NMFS states the following: "The MMPA does not provide for a permit or other authorization to view or interact with wild marine mammals, except for specific listed purposes such as scientific research. Therefore, interacting with wild marine mammals should not be attempted and viewing marine mammals must be conducted in a manner that does not harass the animals. NMFS does not support, condone, approve, or authorize activities that involve closely approaching, interacting, or attempting to interact with whales, dolphins, porpoises, seals, or sea lions in the wild. This includes attempting to swim with, pet, touch, or elicit a reaction from the animals" (*http://www.nmfs.noaa.gov/pr/dontfeedorharass.htm*).

In addition to the national guidelines, each of the five NMFS Regions has developed recommended viewing guidelines relevant to protected species within their region to assist the general public with information on how to responsibly view and act around these animals in the wild. The guidelines are aimed at assisting the public in meeting their obligations under the MMPA and ESA. Although some guidelines address activities that are prohibited under law, others address activities that are not expressly prohibited.

The NMFS Pacific Islands Regional Office's viewing guidelines for Hawaii recommend that people view wild dolphins from a safe distance of at least 50 yards (45.7 m) and advise against trying to chase, closely approach, surround, swim with, or touch the animals. To support the guidelines in Hawaii, NMFS has partnered with the State of Hawaii and the Hawaiian Islands Humpback Whale National Marine Sanctuary over the past several years to promote safe and responsible wildlife viewing practices through the development of outreach materials, training workshops, signage, and public service announcements. NMFS' education and outreach efforts have also been supported by a partnership with the Watchable Wildlife program, a consortium of Federal and State wildlife agencies and wildlife interest groups that encourages passive viewing of wildlife from a distance for the safety and well-being of both animals and people (Duda 1995, Oberbillig 2000, Clark 2006). In addition to the guidance provided to the general public on protected wildlife viewing, several tour industry-specific programs have been initiated in various NMFS regions to further support protection of marine mammals targeted for wildlife viewing. In Hawaii this includes administration of the voluntary Dolphin SMART program for commercial operators who pledge to comply with safe and responsible wildlife viewing practices.

Dolphin SMART is a model wildlife viewing stewardship program developed by NMFS and NOAA's Office of National Marine Sanctuaries in partnership with Whale and Dolphin Conservation, the Dolphin Ecology Project, local businesses, and members of the public, who have teamed up to support responsible viewing of wild dolphins. The program was launched in 2007 in Key West, Florida, was subsequently expanded to the Central and Southwest Florida coast, and established in Hawaii in 2011.

The NMFS Pacific Islands Regional Office developed the Dolphin SMART program in Hawaii to aid education and outreach efforts for Hawaiian spinner dolphin conservation and management. Three businesses on Oahu, one on Kauai, and two on Maui are currently recognized as Dolphin SMART participants.

The Dolphin SMART program goals are to minimize the potential of wild dolphin harassment caused by commercial viewing activities, reduce expectations of close interaction with wild dolphins in a manner that may cause harassment, address advertising that creates expectations of engaging in activities that may cause harassment, and promote responsible stewardship of dolphins in local coastal waterways. The "SMART" acronym stands for:

S—Stay back 50 yards from dolphins
M—Move cautiously away if dolphins show signs of disturbance
A—Always put your engine in neutral when dolphins are near
R—Refrain from feeding, touching, or swimming with wild dolphins
T—Teach others to be Dolphin SMART

More information on the Dolphin SMART program can be found at the following Web sites: *www.dolphinsmart.org* and *www.facebook.com/OfficialDolphinSmart.*

Need for Additional Action

Despite the prohibitions, guidelines, outreach, and stewardship efforts currently in place, close interactions between humans and spinner dolphins continue to occur in Hawaii's waters and are especially prevalent in essential daytime habitats (see Background). In April 2000, the MMC released a literature review of scientific publications that evaluated the impacts of swimming with wild dolphins worldwide (Samuels *et al.* 2000). The authors of this review noted the prevalence of disturbances by tourist activities in areas critical to the animals' well-being, and recommended that precautions be taken to protect the dolphins (Samuels *et al.* 2000).

The concerns about disturbance to spinner dolphins by boaters and swimmers prompted NMFS to raise the topic of enhancing protections for these animals in an Advanced Notice of Proposed Rulemaking (ANPR) (70 FR 73426, December 12, 2005). Public comments received in 2005 reiterated and reinforced the concerns expressed by the MMC. In the years since the 2000 Samuels *et al.* review, additional scientific evidence has documented disturbances or disruptions to spinner dolphins by boaters or swimmers (Forest 2001; Courbis 2004, 2007; Danil *et al.* 2005; Timmel 2005; Courbis and Timmel 2009; Ostman-Lind 2009; Symons 2013; Heenehan *et al.* 2014; Tyne *et al.* 2015). This problem is pronounced in essential daytime habitats that are targeted for dolphin-directed activities, and animals that use these areas are exposed to intense activity on a daily basis. For example, a recent study found that human activities took place within 100 m of spinner dolphins 83 percent of the time the animals were using four essential daytime habitats on the island of Hawaii (Tyne 2015).

Based on extensive review and analysis through internal scoping, external scoping via the ANPR, public scoping for the DEIS, and the best available scientific information, we have determined that the existing prohibitions, regulations, and guidelines need to be strengthened to protect Hawaiian spinner dolphins from various forms of take from human activities that cause harassment or disturbance. Dolphins' response to disturbance varies among individuals, but in most cases it includes a departure from natural behavioral patterns that support the animal's health and fitness, and chronic disturbance may result in negative impacts to the fitness of individuals and/or populations. We therefore deem it necessary and appropriate to adopt additional regulations to clarify human activities that result in take of Hawaiian spinner dolphins, including harassment or other forms of disturbance as currently defined by statute and regulation.

Although unauthorized take of dolphins continues to be illegal wherever it occurs, we are focusing these regulations in nearshore areas, out 2 nm (3.7 km) from shore of the MHI and including designated waters between Lanai, Maui, and Kahoolawe (see Figures 1 and 2 in section 216.20(e) and *Geographic Area* section below), where the threat from dolphin-directed activities is concentrated and where spinner dolphins engage in daytime behaviors, including resting, socializing, nurturing, and traveling. These additional measures are intended to prevent "take" during important resting periods and allow Hawaiian spinner dolphins to engage in normal fitness-enhancing behaviors, thereby preventing long-term negative impacts to individuals and to the population.

Development of Proposed Regulations

In 2005, NMFS convened a Spinner Dolphin Working Group with representatives from the MMC, State and Federal agencies, and scientific researchers who work on spinner dolphin conservation concerns. The group evaluated the best available information at the time to understand the scope of the tourist and recreational activities targeting spinner dolphins. As noted above (Need for Additional Action section), in December 2005, we published an ANPR in the **Federal Register** (70 FR 73426, December 12, 2005) to solicit input from the public on potential ways to better enhance protections for spinner dolphins and mitigate activities of concern (*e.g.,* close approach and swim-with activities). This was followed by a Notice of Intent (NOI) to Prepare an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) (71 FR 57923; October 2, 2006), in which we identified a preliminary list of potential regulations for future consideration and comment, which included partial time-area closures in certain spinner dolphin essential daytime habitats, a minimum distance limit for approaching dolphins in the wild, restrictions on certain human behaviors in NMFS-identified spinner dolphin resting areas, and complete closure of all known spinner dolphin resting areas in the MHI.

During the ANPR and the NOI comment periods, five public scoping meetings were held on the islands of Kauai, Oahu, Maui, and Hawaii, and oral statements were taken at each meeting. NMFS received a total of 4,641 public comments in response to the ANPR and the NOI (this includes all emails, letters, and public testimonies). Comments were submitted by concerned citizens, tour operators, scientific researchers, conservation and education groups, and Federal, State, and other government entities.

Comments received through both of the public comment periods varied widely and recommended numerous actions to consider, ranging from no regulations to permanent closure of areas used by the dolphins for rest and shelter. Additionally, public comments raised concerns about various topics that should be addressed in the EIS or proposed action. These concerns are grouped into various topics in the final scoping report, and include the following topics: Hawaiian spinner dolphin biology and behavior; cultural issues; cumulative effects; data/data gaps; direct and indirect effects; education/outreach; enforcement; the ESA; guidelines/solutions for other species or from other countries; human-dolphin interaction, medical benefits from swimming with dolphins; MMPA; monitoring; the NEPA; public and stakeholder involvement; regulatory regime; social and economic issues; spiritual and religious issues; take and harassment, traditional Hawaiian knowledge; and welfare of the dolphins. Although comments varied greatly, a consistent theme that stood out under several topics was the need for effective and enforceable regulations.

As a result of stakeholder concerns expressed through these public comments, and for the preparation of this rule and associated DEIS, we made multiple site visits to areas where concerns have been raised regarding Hawaiian spinner dolphin disturbance in the MHI. During these visits, we met with concerned members of the public to gather information relevant to this analysis. Additionally, we coordinated with State and Federal agencies, and used the public comments generated from the ANPR and NOI to develop a range of actions and mitigation measures that are reflected in numerous alternatives under consideration for the proposed action.

Presentations made at the public scoping meetings, the April 2007 EIS public scoping summary report, a list of the attendees, the ANPR, public comments, and background materials are provided at *http://www.fpir.noaa.gov/PRD/prd_spinner_EIS.html.*

We relied on the public comments on the ANPR and the NOI, and on new scientific information to develop a range of regulatory and non-regulatory alternatives, including the alternative of not adopting regulations. We analyzed the environmental effects of these alternatives and considered options for mitigating effects. After a preliminary analysis of alternatives, we developed and analyzed the effects of the swim-with and 50-yard (45.7 m) approach regulations, which we chose as our preferred alternative, which includes no interception (*i.e.,* "leapfrogging" or placing a person or vessel in the path of dolphins for the purpose of interception). As more fully discussed below, we specifically seek public comment on whether these proposed measures alone will provide sufficient protection to spinner dolphins from human interactions.

Although not currently proposed, we are considering whether other management measures also may be necessary and appropriate to protect Hawaiian spinner dolphins from take, especially in essential daytime habitats targeted by humans for dolphin-directed activities. Accordingly, we have also analyzed the effects of the alternative management measures of promulgating swim-with and approach regulations, while additionally creating either mandatory (see DEIS Alternative 4) or voluntary (see DEIS Alternative 5) time-area closures in five essential daytime habitats. The results of our analyses are contained in a DEIS. The DEIS is available for review and comment in association with this rulemaking (see **ADDRESSES**). A description of these alternatives is also included in the *Additional Measures Under Consideration* section of this proposed rule.

SAPPHIRE Project

During the initial scoping period for the Spinner Dolphin Human Interaction EIS, we received comments that recommended gathering additional information on Hawaiian spinner dolphins, including monitoring local populations to determine impacts to numbers and overall health of the MHI resident spinner dolphins. In response to this recommendation and to inform this rulemaking effort, NMFS internal grant funding was awarded to the "Spinner Dolphin Acoustics, Population Parameters, and Human Impact Research" (SAPPHIRE) program, conducted jointly by Duke University and Murdoch University. The SAPPHIRE project's objective was to provide baseline data on the local abundance, distribution, and behavior of spinner dolphins in Kealakekua Bay, Honaunau Bay, Kauhako Bay, and Makako Bay off of the island of Hawaii, as well as in nearshore, shallow-water environments near these resting bays. This intensive study integrated a suite of visual and acoustic sampling techniques, using boat-based and land-based surveys, as well as acoustic recording devices, to assess the following: Spinner dolphin daytime habitat use and resting behavior in study areas and surrounding waters; residency and fidelity patterns of spinner dolphins during the day in nearshore habitats in both the study areas and surrounding waters; spinner dolphin exposure to human activities within the studied resting bays and surrounding waters; and spinner dolphin demographic response to human activities within resting bays and surrounding waters.

Research in the four bays and nearshore waters of the island of Hawaii began in August 2010 and was completed in May 2013. Results from this study provided robust population estimates for the Hawaii Island stock (see Background), as well as additional information about spinner dolphin habitat use and the pressure that this resident stock faces from dolphin-directed human activities. Many of these studies have been published in scientific literature and scientific reports and were used to inform this rulemaking process (Thorne *et al.* 2012, Johnson *et al.* 2013, Heenehan *et al.* 2014, Tyne *et al.* 2014, Tyne 2015, Tyne *et al.* 2015). Below we describe information gained from several of these studies.

Early researchers (Norris and Dohl 1980, Norris *et al.* 1994) hypothesized that essential daytime habitats have specific environmental characteristics making them more favorable to the dolphins in supporting resting behaviors, such as shallow, calm, flat, protected, sandy-bottomed bays that provide easy access to nearby deep-water foraging areas. Thorne *et al.* (2012) used dolphin surveys and predictive habitat modeling to test a suite of these environmental factors that may make spinner dolphins favor these areas. The study found that proximity to deep-water foraging areas, depth, the proportion of bays with shallow depths, and low rugosity (indicating low substrate roughness, *i.e.,* sand) were important predictors of spinner dolphin habitat. The strongest predictors of spinner dolphin resting habitat were distance to the 100-m depth contour (foraging habitat) and depth of the resting areas, with spinner dolphin resting habitat generally occurring in the shallow depths (<50 m) within a bay that was close to the 100-m depth contour and thus, their offshore foraging grounds (Thorne *et al.* 2012). In tests of these characteristics across the MHI, the bays that were predicted by the model to be optimal resting habitats were consistent with spinner dolphin resting habitats that are recognized as preferred from various observations and identified in the DEIS.

Tyne *et al.* (2015) further examined key ecological characteristics and spinner dolphin behavior to see which characteristics support resting behavior. The most important factor contributing to the likelihood of rest was the dolphins' presence within a bay, meaning that they were most likely to rest when they were inside a bay (Tyne *et al.* 2015). Another important factor was the presence of sand substrate. In general, spinner dolphins spent disproportionately more time over sandy substrates in and out of bays; however, outside of bays, spinner dolphins were observed mostly travelling over sandy substrates. This supports the finding that the bays themselves are the most important factor for resting behaviors, because even sandy substrate outside of the bays did not significantly predict resting behavior. This work highlights the role that habitat areas play in supporting important fitness enhancing behaviors, specifically rest.

Johnson *et al.* (2013) assessed the influence of human activity on the energy budget of Hawaiian spinner dolphins using a theoretical model and comparing predictions from the model to empirical data collected in Kealakekua Bay on spinner dolphin behavior. Under the model, individual dolphins needed to spend at least 60 percent of their time inshore in a resting state to be in a positive energetic balance. Given this assumption, direct observations of spinner dolphins suggest that these animals are currently spending adequate amounts of time engaged in resting behaviors to meet their energetic requirements; however, researchers cautioned that individuals with high energetic demands could be at a deficit. For example, nursing mothers and juveniles generally have a much higher energetic demand and these individuals could be at risk of an energetic deficit. This study also evaluated the likelihood of spinner dolphins resting, given various human activities occurring at different distances. Researchers found that the presence of swimmers within 150 m significantly decreased the likelihood of resting. Interestingly, the likelihood of dolphins resting was higher when vessels were present between 50 and 150 m, creating the appearance of a positive relationship between resting behavior and vessel presence at this distance. These results may demonstrate a difference in dolphins' perceived risk between swimmers and vessels, or a lack of perceived risk associated with vessels. However, this positive relationship between resting behavior and vessels may also be influenced by the high frequency of observations with vessels present between 50–300 m and few observations with no vessels present (Johnson *et al.* 2013).

Tyne (2015) similarly noted that spinner dolphins off the west coast of the island of Hawaii are exposed to a high rate of human activities and that this rate of exposure may obscure researchers' ability to distinguish disturbance effects associated with intense viewing pressures. In his evaluations, Tyne (2015) found that spinner dolphins were exposed to human activities within 100 m over 80 percent of the time that the dolphins were using essential daytime habitat. Evaluations between control conditions, *i.e.*, no vessels or people within 100 m of dolphins, and exposure conditions, *i.e.*, vessels or people within 100 m of dolphins, suggested that human activities did not have a significant effect on the probability of spinner dolphins engaging in resting, socializing, or traveling. However, control conditions did not occur often (less than 18 percent of the time) or for long periods of time (median duration of 10 minutes), preventing a robust comparison for the purposes of measuring effects. With so little control data and with short durations between exposures to human activity, Tyne (2015) questioned whether the observed data were representative of true or deep resting behavior, or whether observed resting behavior may only be "light" rest. In this case, observing behavior alone may not be a reliable indicator for measuring disturbance effects, because observed resting behavior may not represent behavior that provides restorative benefits for these animals. The rate of exposure to human activities off the west coast of the island of Hawaii is 25 percent higher than reported for other dolphins studied for behavioral response to human activities in other areas of the world (Tyne 2015). This rate of exposure may place resident stocks at risk and long-term disturbance could result in habitat displacement or reduced fitness as seen in other dolphin populations (Bejder *et al.* 2006a, 2006b; Lusseau and Bejder 2007).

Proposed Rulemaking

The swim-with and approach prohibitions described in this proposed rule are designed to protect spinner dolphins from take, including harassment and disturbance, caused by dolphin-directed activities that are concentrated in coastal waters (within 2 nm (3.7 km) of shore and in designated waters between Lanai, Maui, and Kahoolawe) and reduce the impact of increased viewing and interaction pressures. Although we stress that unauthorized take of spinner dolphins or any marine mammals already is and continues to be prohibited by the MMPA in any location, we believe that specific regulations aimed at identified human activities that result in take of Hawaiian spinner dolphins is warranted because of the chronic disturbance that is currently taking place in nearshore waters. NMFS is proposing these regulations pursuant to its rulemaking authority under MMPA sections 112(a) (16 U.S.C. 1382(a)) and 102 (16 U.S.C. 1372).

Although not included in this proposed rule, we are also considering whether additional management measures may be necessary and appropriate to protect Hawaiian spinner dolphins from take, especially in essential daytime habitats targeted by humans for dolphin-directed activities. The *Additional Measures Under Consideration, Time-Area Closures* section below discusses both mandatory and voluntary time-area closures as two alternative management options that may enhance protections for Hawaiian spinner dolphins beyond the proposed swim-with and approach rule.

Scope and Applicability

Applications to All Hawaiian Spinner Dolphins

The proposed rule's swim-with and approach prohibitions would apply to all Hawaiian spinner dolphins found in the action area (see *Geographic Action Area* section below).

Geographic Action Area

The action area for this rule is limited to waters within 2 nm (3.7 km) of each of the MHI and in designated waters between the islands of Lanai, Maui, and Kahoolawe (see Figures 1 and 2 in section 216.20(e)). The latter designated waters include all water areas enclosed by three line segments that connect points at the 2-nm boundary between the islands as follows: The rhumb line between (A1) 20°32′51″ N./156°43′50″ W. and (A2) 20°42′4″ N./156°55′34″ W. between Kahoolawe and Lanai; the rhumb line between (B1) 20°51′1″ N./156°54′0″ W. and (B2) 20°59′48″ N./156°42′28″ W. between Lanai and Maui; and the rhumb line between (C1) 20°33′55″ N./156°26′43″ W. and (C2) 20°32′15″ N./156°29′51″ W. between Maui and Kahoolawe. Throughout this rule, all coordinates are referenced to the World Geodetic System of 1984 (WGS84).

This is inclusive of the majority of the nearshore habitats where MHI resident stocks of spinner dolphins engage in daytime behaviors and where dolphin-directed human activities that may result in take are known to occur (see Rationale section below).

Applications to All Forms of Swimming and Approach

The regulations apply to all forms of swim-with and approach activities in water and air. Forms of approaching spinner dolphins include, but are not limited to, operating a manned or unmanned motorized, non-motorized, self-propelled, human-powered, or submersible vessel; operating an unmanned aircraft system (UAS) or drone; and swimming at the water surface or underwater (*i.e.*, SCUBA or free diving).

Requirements of the Proposed Rule

Swim-With and Approach Regulations

The proposed rule would prohibit people from engaging in the following activities around Hawaiian spinner dolphins:

(1) Approaching or remaining within 50 yards (45.7 m);

(2) Swimming or attempting to swim within 50 yards;

(3) Causing a vessel, person, or object to approach or remain within 50 yards; and

(4) Intercepting, or placing a vessel, person, or other object on a path of a spinner dolphin so that the dolphin approaches within 50 yards of the vessel, person, or object.

Exceptions

NMFS considered specific categories that should be exempt from the regulations, which are proposed below:

(1) Any person who inadvertently comes within 50 yards (45.7 m) of a Hawaiian spinner dolphin or is approached by a spinner dolphin, provided the person makes no effort to engage or pursue the animal and takes immediate steps to move away from the animal;

(2) Any vessel that is underway and is approached by a spinner dolphin, provided the vessel continues normal navigation and makes no effort to engage or pursue the animal;

(3) Any vessel transiting to or from a port, harbor, or in a restricted channel when a 50-yard distance will not allow the vessel to maintain safe navigation;

(4) Vessel operations necessary to avoid an imminent and serious threat to a person or vessel;

(5) Activities authorized through a permit or authorization issued by the NMFS to take spinner dolphins; and

(6) Federal, State, or local government vessels, aircraft, personnel, and assets when necessary in the course of performing official duties.

The exception for vessels transiting to or from ports, harbors, or restricted channels is necessary to allow continuation of safe navigation when approaching spinner dolphins closer than 50 yards is unavoidable. For these cases, the vessel should continue normal navigation to reduce the likelihood that close interactions result in disturbances for an appreciable period of time. The exception for vessel operations necessary to avoid an imminent and serious threat to a person or vessel is needed for the safety of human life and property, and to allow for compliance with applicable navigation rules. The exception for government vessels, aircraft, personnel, and assets operating in the course of official duties is intended to avoid disruption of essential government missions, including enforcement and national security activities. The exception for vessels or persons engaged in an activity authorized through a permit or other authorization issued by the NMFS to take spinner dolphins is necessary to ensure the continued availability of scientific research and biological data necessary to inform management and conservation decisions related to the dolphins. We anticipate that compliance with relevant permit terms and conditions will help minimize the potential impacts to dolphins.

Rationale

Proposed Action—Swim-With and Approach Regulations

Hawaiian spinner dolphins resident to the MHI are made up of small, genetically isolated stocks that exhibit a specialized behavioral ecology that makes them easy to access in coastal environments during their daytime resting hours. This leaves these resident stocks vulnerable to human-caused disturbance and its effects such as habitat abandonment or declines in reproductive success (Norris *et al.* 1994, Andrews *et al.* 2010, Tyne *et al.* 2014). In the MHI, dolphin-directed activities have increased in recent years and the public's expectation of close interactions has placed increased pressure on resident stocks of Hawaiian spinner dolphins and the habitats that support these stocks (see Background above). Despite outreach, guidelines, and current prohibitions, observations in the field indicate that MHI resident Hawaiian spinner dolphins' natural behaviors are disrupted by activities that include approach by both swimmers and vessels (Ostman-Lind *et al.* 2004, Danil *et al.* 2005, Courbis 2004, Courbis and Timmel 2008), and overarching spinner dolphin group behavioral patterns may be changing in essential daytime habitats as a result of these pressures (Norris *et al.* 1994, Forest 2001, Courbis 2004, Courbis and Timmel 2008).

Observed individual dolphin responses to disturbance events when closely approached by people and vessels include charging or threat displays, aerial displays, and avoidance behaviors such as moving around and away from people and vessels, or leaving the bay in response to human pursuit (Norris *et al.* 1985, Norris *et al.* 1994, Forest 2001, Ostman-Lind *et al.* 2004, Courbis 2004, Courbis and Timmel 2008). Additionally, researchers have observed changes to behavioral patterns in essential daytime habitats, including differences in aerial activity (Courbis and Timmel 2008) and changes in dolphin residence time and distribution within essential daytime habitats, that may be linked to the intensity of human activity (Forest 2001; Danil *et al.* 2005; Courbis 2004, 2007; Courbis and Timmel 2008; Ostman-Lind 2007).

Chronic disturbance can disrupt natural behavioral patterns associated with feeding, resting, nurturing, and socializing, and diminish the animals' ability to utilize the benefits of important habitat, ultimately resulting in negative impacts to the fitness of individuals and resident populations. For example, disturbance while spinner dolphins are resting detracts from the dolphins' abilities to recuperate from energetically demanding behaviors such as foraging, transiting to and from offshore foraging grounds, and nurturing their young. If these disturbances happen chronically, the lack of consistent, undisturbed resting periods can reduce the amount of energy available to forage and care for young. In other small cetacean populations, chronic human disturbances have been linked to biologically significant impacts such as reduced female reproductive success (Bejder 2005, Lusseau and Bejder 2007).

In other locations globally, intense dolphin-directed human activities have resulted in changes to targeted dolphin populations' habitat use and even caused habitat abandonment (Bejder *et al.* 2006a, 2006b; Gannier and Petiau 2006; Nature Conservation Sector 2006; Lusseau and Bejder 2007; Notarbartolo-di-Sciara *et al.* 2009). For example, in a bay in Tahiti, spinner dolphin residence times were negatively influenced by boat presence. Spinner dolphins often left the bays earlier when there was an increase in boat presence, and this increased boat disturbance may have deterred dolphins from entering the bay the next day (Gannier and Petiau 2006). Additionally, in Samadai Reef, Egypt, spinner dolphins were reported as noticeably distressed from excessive numbers of visitors and people attempting to interact with the dolphins (Notarbartolo-di-Sciara *et al.* 2009). The spinner dolphin group abandoned this preferred resting area, presumably to avoid the disturbance from vessels and visitors (Nature Conservation Sector 2006), and did not returned to the site until after management measures were put in place. Management measures included prohibiting human entry into the core resting area, and restricting certain activities in areas surrounding the core resting area to prevent further disturbance (Nature Conservation Sector 2006, Notarbartolo-di-Sciara *et al.* 2009).

Chronic disturbance of spinner dolphins in the MHI could negatively affect the habitat use or health of resident populations. Additionally, disturbance effects may be amplified in the MHI's resident stocks, which exhibit high site fidelity and restricted gene flow, because the impacts to multiple individuals' health and fitness are quickly reflected in the overall fitness of these small populations (Bejder 2005).

The 50-yard (45.7 m) approach regulation, including prohibiting swimming with dolphins, is intended to reduce the degree of behavioral disruption from close approaches by vessels and swimmers, while allowing for meaningful dolphin watching opportunities. Research indicates that spinner dolphins exhibit changes and disruptions to natural behaviors from close approach by swimmers (Danil *et al.* 2005, Courbis and Timmel 2008) and that swimmer presence within 150 m reduces the likelihood of spinner dolphins being in a resting state (Symons 2013, Johnston *et al.* 2014). Approach by vessels and watercraft have also been shown to disrupt and alter spinner dolphin behavior (Ross 2001, Forest 2001, Timmel *et al.* 2008). In the MHI, several studies note that close approach by vessels disrupt dolphin behaviors at various distances ranging from 10 m to 300 m (Forest 2001, Timmel *et al.* 2008). At Midway Atoll in the Northwestern Hawaiian Islands, Ross (2001) found that spinner dolphins were affected by vessel presence at distances as great as 500 m and that the effects increased as the distance decreased. Although Johnson *et al.'s* (2013) work in the MHI found the likelihood that dolphins were resting was higher when vessels were present between 50 and 150 m, they noted that these results may be influenced by the fact that vessels were present in proximity to the dolphins most of the time.

We have considered multiple distances that may provide protections for spinner dolphins from human activities that result in take (such as swimming with and approaching dolphins), including 50 yards, 100 yards (91.4 m), or even greater distances. NMFS believes that 50 yards is the minimum distance that will prevent most forms of take, while also providing the public with sufficient opportunity to tailor their conduct to avoid disruptive encounters with spinner dolphins. We already recommend this distance (50 yards) in our wildlife viewing guidelines and request that people do not swim-with wild dolphins to reduce the risk of behavioral disruption from close encounters. These guidelines are recognized by tour operators and are used by some (*e.g.,* Dolphin SMART operators) to help ensure that spinner dolphins are viewed responsibly.

A 100-yard approach restriction exists for humpback whales and this distance was also considered for reducing take of spinner dolphins. Spinner dolphins are fast-moving, small cetaceans and groups of dolphins may move through areas changing directions throughout the day. A distance restriction of 100 yards provides more space for these animals to move back and forth, and helps ensure that people and vessels have sufficient opportunity to maintain an appropriate distance to avoid take. A 100-yard approach restriction might also be easier for vessel operators to recognize and achieve, as this distance applies to humpback whales. However, approach regulations at a distance greater than 50 yards may be difficult for recreational swimmers to recognize and achieve in the water. Based on the best scientific information available, it is difficult to determine a precise distance beyond which human activity does not have the potential to cause disturbance by disrupting natural behaviors. However, we recognize that not all approaches within 100 yards result in take, and we are concerned that such a prohibition may unnecessarily burden the public, without necessarily achieving the purposes of this rulemaking. Further, this greater distance may diminish both the experience of dolphin watching and opportunities to participate in dolphin watching, because these animals are small and may be difficult to spot at a distance. NMFS recognizes that the dolphin watching industry is important to Hawaii's economy, and that these tours have the ability to inform the public about dolphins and to foster stewardship. To reduce the threat of take occurring (including harassment and disturbance) when swimmers and vessels closely approach dolphins, to remain consistent with the current recommended approach guideline for the region, and to allow for continued dolphin watching opportunities at safe distances, NMFS is proposing a distance of 50 yards for swim-with and approach restrictions.

The proposed swim-with and approach regulations prevent a range of human activities that occur in close proximity to Hawaiian spinner dolphins. This includes swimming-with spinner dolphins, touching or attempting to touch spinner dolphins; corralling or herding spinner dolphins into small areas; and leap-frogging, all of which have the potential to disturb the dolphins and result in take. Implementation of these prohibitions would include enforcement by NMFS and DLNR Division of Conservation and Resource Enforcement (DOCARE) personnel, and outreach by NMFS staff and volunteers who would assist with an informational campaign about the new regulation and the scientific information on which it is based. This proposed rule provides new tools for enforcement that are measurable, easy to understand, and based on the best available science regarding human impacts on spinner dolphins. To limit some potential impacts to the public from these regulations, we propose exceptions that are designed to allow for transit into and out of ports, harbors, and restricted channels; public safety measures; avoidance of penalties when the animal has closely approached a boat or person; and continuation of essential government and permitted activities (see *Exceptions* section above). The DEIS contains a full analysis of a No Action Alternative, other alternatives, and the Preferred Alternative.

The costs of implementing human and vessel regulations to protect the dolphins are expected to be low. Some will be borne by the commercial dolphin watch and dolphin swim industry, dolphin-associated spiritual retreats, and other generalized nature tours (see the DEIS and the *Regulatory Flexibility Act* section below for more information). While some dolphin watch companies and community members have suggested that restricting swimming with the dolphins or closely approaching them may affect revenue, surveys of tour participants indicate that close approach of the dolphins may not be the most important aspect for the dolphin watching participants, and that participants will support viewing these animals in a manner that reduces the potential for disruptive encounters with dolphins (Wiener 2015). Other impacts to boaters, swimmers, kayakers, and others who are not engaged in dolphin-directed activities are expected to be minor and include slight changes to operations to comply with the proposed regulations.

The reduction in disturbance to Hawaiian spinner dolphins, as addressed through each element of the rule as described above, provides a benefit to the dolphins as well as to members of the public who value the dolphins. Reducing threats to the dolphins also supports the long-term sustainability of the responsible dolphin watching industry.

Geographic Scope (Distance From Shore)

The proposed regulations are designed to address dolphin-directed activities that are resulting in various forms of take of Hawaiian spinner dolphins. NMFS selected 2 nm (3.7 km) from shore around the MHI as well as designated waters between the islands of Lanai, Maui, and Kahoolawe as the boundary for the proposed prohibitions because this range encompasses the areas where current and best available information indicates that most dolphin-directed activities are likely to be concentrated. NMFS gathered information from scientific literature about Hawaiian spinner dolphin daytime habitat preferences and information from over 400 sightings of spinner dolphins collected around the MHI since 1992 from various members of the Pacific Islands Photo Identification Network (PIPIN) to determine where resident spinner dolphins are likely to occur during the day. Dolphin-directed activities in Hawaii are concentrated in the nearshore portion of the island-associated Hawaiian spinner dolphin stocks' ranges because these stocks are easily accessed in coastal waters during the day when most people seek out marine recreational activities.

Daytime habitat for Hawaiian spinner dolphins varies across the MHI, because the bathymetry, or depths and shapes of underwater terrain, is different for each island, and spinner dolphins seek out areas with physical and biological characteristics that support their ecological needs (see Background section). On Hawaii Island, Norris *et al.* (1994) indicate that spinner dolphins generally prefer areas with depths of less than 50 m for engaging in resting activities, and Thorne *et al.* (2013) note that resting habitats generally occur in close proximity to the 100-m contour (close to the inshore extent of prey species at night). Spinner dolphins are also known to transit along Hawaii Island's coastline, moving between resting areas during the day. Lammers *et al.* (2004) indicate that Oahu's spinner dolphins show a strong affinity for the 10-fathom isobath (18.3 m), and note that approximately 93 percent of sightings off Waianae and 81 percent of sightings off the south shore of Oahu occurred at depths shallower than 17 fathoms (31.1 m). Lammers *et al.* (2004) also note that foraging activities begin by evening around the 100-fathom isobath (182.9 m) off Oahu. Information received from PIPIN indicates that approximately 89 percent of spinner sightings across the MHI were in waters within the 100-m depth contour and that 95 percent were in waters within the 200-m depth contour, although spinner dolphins have been observed in waters during the day where depths are as great as 3,000 m (NMFS 2016).

In reviewing this information, we determined that selecting a boundary based on depth in any particular area may be difficult for people to identify without having access to proper instrumentation (which would be especially difficult for kayakers, standup paddleboarders, and swimmers), and that the distance from shore may provide a more easily discerned boundary. In addition, although spinner dolphin daytime habitat may be located at different distances from the shoreline of different islands, establishing different prohibitions based on the location of these daytime habitats (*e.g.*, having restrictions out to 1 nm (1.9 km) or 2 nm depending on the island) could subject the public to inconsistent and confusing requirements, and complicate both enforcement of and compliance with these regulations. This could be particularly difficult in areas where multiple islands are visible and the restricted distances differ around different islands. Therefore, we evaluated consistent distances from shore across the MHI.

We reviewed the habitat preferences and sighting information as it relates to distance from shore to identify a boundary that would be easy for people to recognize and would incorporate the best available information about spinner dolphin habitat preferences and sighting information. Along the west coast of Hawaii Island, habitats that are 50 m or less in depth and where dolphin-directed activities are prevalent, are encompassed within 1–1.5 nm (1.9–2.8 km) from shore. Habitats within 100 m depth fall almost entirely within 2 nm of shore, and at 3 nm (5.6 km) these areas are entirely included. Off the west coast of Oahu, where most dolphin-directed activities on this island occur, the 10-fathom (18.3 m) isobath is largely captured within 1 nm of shore, while 17 fathoms (31.1 m) is largely captured within 1.5 nm. Habitats of these depths extend out farther on the south shore where spinner dolphins are also known to rest; these habitats are largely captured within 1.5 and 2 nm from shore respectively. The 100-fathom (182.9 m) contour is largely captured within 1.5 nm on the west side of the island, but extends out past 3 nm on the south shore. Little information is available from the other MHIs regarding specific depth preferences, although there are areas where the 50- and 100-m depth contours extend past 4 nm (7.4 km). Off most of the MHI, a large majority of the PIPIN sighting information is captured within 2 nm from shore.

A key area for spinner dolphin sightings during the day, where the depth contour extends out past 4 nm, is between the islands of Lanai, Maui, and Kahoolawe. This area is traversed by many recreational and commercial tour vessels in search of marine mammal viewing opportunities throughout the day. Consequently, spinner dolphins also require protections in this area. To ensure that dolphins are protected throughout the day where they may transit between islands and encounter dolphin-directed activities, we delineated an area around all three islands that includes the 2-nm buffer around the outside of each island and the channels and waters between these islands. This delineated area includes 96 percent of all PIPIN sighting information across the MHI.

We are proposing this action to reduce the threat of take of Hawaiian spinner dolphins (including harassment and disturbance) caused by dolphin-directed activities that are concentrated in coastal waters of the MHI and to reduce the impact of increased viewing and interactions pressures on MHI resident stocks. We do not expect that these same pressures are prevalent in the outer portions of the MHI stocks' ranges, because these spinner dolphins are not easily accessed when they are offshore. Therefore, the proposed rule applies to an area within 2 nm of the MHI and in designated waters between the islands of Lanai, Maui, and Kahoolawe. This area encompasses the majority of the resident stocks' daytime habitat, thereby incorporating the area where spinner dolphins are easily accessed and where take of Hawaiian spinner dolphins is most likely to occur.

Additional Measures Under Consideration: Time-Area Closures

Although not currently proposed, we are also considering and seeking public comment on whether additional management measures (beyond swim-with and approach regulations) may be necessary and appropriate to protect Hawaiian spinner dolphins from take, especially in essential daytime habitats targeted by humans for dolphin-directed activities. At this time, we believe that the swim-with and approach regulations alone will provide sufficient protection to Hawaiian spinner dolphins, by reducing close encounters between spinner dolphins and humans that result in take. We also expect that the swim-with and approach regulations will reduce the intensity of activities within essential daytime habitats that are targeted by people for dolphin-directed activities to some degree. However, NMFS recognizes that the intensity of activity in some of these areas is high and that additional measures could be necessary.

Area closures have been shown to be an effective management tool for addressing the intensity of wildlife viewing and interaction in other areas globally (Notarbartolo-di-Sciara *et al.* 2009, Nature Conservation Sector 2006). Area closures provide members of the public with precise boundaries so that they may readily tailor their conduct accordingly. However, area closures can also carry undesired costs, such as by imposing a burden on the public when spinner dolphins are not present. We are mindful of this potential and believe a careful approach is warranted. By first implementing swim-with and approach regulations, we expect to reduce take of Hawaiian spinner dolphins resulting from interactions with swimmers and vessels. We also expect to gather additional information about the effectiveness of these measures. Should this action's swim-with and approach regulations provide insufficient protection for Hawaiian spinner dolphins using essential daytime habitats, we would consider additional conservation and management measures, including time-area closures, to reduce take in high intensity areas. Below we discuss two management options that are analyzed in the DEIS. We invite public comment about whether and at what point these management options or others may be necessary and appropriate to protect Hawaiian spinner dolphins from take.

Two possible management options evaluated in the DEIS would create either mandatory (see Alternative 4 in the DEIS) or voluntary (see Alternative

5 in the DEIS) time-area closures in five essential daytime habitats, in addition to the swim-with and approach regulations. We selected the five areas for potential time-area closures using a step-down process. In this approach, we identified important habitats that might benefit from additional protection, and then considered additional factors that may promote or obstruct the effectiveness of the closure. (See Appendix A of the DEIS for more detail.) The five sites are essential daytime habitats where human activities are largely Hawaiian spinner dolphin-directed, where closures are logistically feasible, and where regulatory measures can be balanced most effectively with human ocean use to protect these dolphins. Once the sites were selected for time-area closures, we delineated core areas within each of the five sites where spinner dolphins are most often engaged in resting activities. The core areas would be subject to closure, while leaving other areas of the bays open in order to minimize impacts on other human activities (*e.g.*, snorkeling, surfing).

As noted in the SAPPHIRE Project section above, essential daytime habitats are particularly important to island-associated spinner dolphins because the habitats provide environmental characteristics that support the dolphins' ability to minimize travel to offshore food sources and to detect predators (Norris and Dohl 1980, Norris *et al.* 1994, Thorne *et al.* 2012). Tyne *et al.* (2014) reported that spinner dolphins off the island of Hawaii are most likely to rest while inside these habitats that support predator detection and noted that dolphins using these areas off the west coast of Hawaii are experiencing human activities within 100 m over 80 percent of the time. Chronic wildlife disturbance within important habitats may lead to habitat abandonment and/or negatively impact the health of individual dolphins, ultimately leading to population level impacts (Frid and Dill 2002, Bejder 2006). Additional management in these areas may be important to ensure that Hawaiian spinner dolphins are given sufficient space for groups to engage in deep resting behaviors that allow dolphins to recuperate from other energy demanding activities, such as foraging.

For time-area closures we are considering a closure time of 6 a.m. to 3 p.m. This time-period would allow spinner dolphins to enter essential daytime habitats without disturbance and remain in these areas undisturbed during peak resting hours, while allowing for human activities to occur (at a distance greater than 50 yards (45.7 m) in accordance with the approach regulations) after 3 p.m. Historic spinner dolphin resting times (before human interactions were likely a major factor in the dolphins' resting patterns) were observed to occur between dawn and dusk (Norris and Dohl 1980), and research indicates that Hawaiian spinner dolphin resting behavior still occurs throughout daytime hours (generally 6 a.m. to 6 p.m.) with the highest resting activity occurring between 10 a.m. and 2 p.m. (Tyne *et al.* 2015). Nevertheless, some Hawaiian spinner dolphin groups have been deterred from entering their essential daytime habitat if human presence in the area was too high early in the day (Danil *et al.* 2005). Preventing disturbance in these habitats during early morning hours is important to support spinner dolphins' arrival to the essential daytime habitat and their descent into rest. The late afternoon hours are considered a time of transition and described as a time when the dolphins rally together and engage in zig zag movements as they are waking from their deep rest, prior to moving offshore to their foraging grounds (Norris *et al.* 1994). However, the afternoon hours are also a popular time for human recreational use. Because the swim-with and approach regulations would provide a measure of protection for spinner dolphins as they increase activity toward the end of their resting period, we would end the closure time at 3 p.m. Swim-with and approach regulations would continue to provide a buffer of protection to the dolphins at the end of their peak resting times, while also allowing some of these human activities to occur for a limited time period.

For either mandatory or voluntary closure options, the closure areas would be marked using buoys, sight-line markers, and landmarks from shore, and explanations of the closure's purpose and effective hours would be provided by signs on land and through other public outreach efforts. The intent of both mandatory and voluntary closures would be to prevent take by eliminating the intense human activity within essential daytime habitats during important resting times. These closures would allow for increased opportunities for spinner dolphins to engage in fitness-enhancing behaviors in the absence of vessels and people.

The bays identified for the mandatory and voluntary time-area closure options are (1) Makako Bay, (2) Kealakekua Bay, (3) Honaunau Bay, and (4) Kauhako Bay on the island of Hawaii, and (5) La Perouse Bay on the island of Maui. Below we describe the areas delineated for the time-area closures; these areas are also depicted in Figures 1–5 of this preamble.

Makako Bay. The lines between points A, B, C, and D shown in Figure 1 illustrate the marine boundaries for the time-area closure for Makako Bay; the shoreline boundary is at the mean lower low water line (meaning activities could occur in the intertidal zone) between points A and D. The following geographic coordinates provide the approximate location for each point in Figure 1: A) 19°44′21.61″ N., 156°3′16.37″ W.; B) 19°44′25.18″ N., 156°3′26.07″ W.; C) 19°44′2.16″ N., 156°3′35.51″ W.; and D) 19°43′57.31″ N., 156°3′23.04″ W. Two buoy markers would be placed at points B and C aligned with site line markers on shore at points A and D to delineate the closure area (Figure 1). The closure encompasses approximately 0.14 mi^2 (0.36 km^2) of essential daytime habitat used by Hawaiian spinner dolphins. These coordinates, and coordinates for the other time-area closures, are considered approximate because the exact locations would not be specified until the buoy anchoring system is identified and an underwater survey is completed.

No public access point from shore is identified by the County of Hawaii for Makako Bay. The closest access points are identified south at Wawaloli Beach, with another access point identified North at Keahole Point.

Kealakekua Bay. The lines between points A, B, C, and D shown in Figure 2 illustrate the time-area closure for Kealakekua Bay. The following geographic coordinates provide the approximate location for each point in Figure 2: A) 19°28′37.82″ N., 155°55′15.03″ W.; B) 19°28′54.23″ N., 155°55′44.90″ W.; C) 19°28′48.42″ N., 155°55′49.04″ W.; and D) 19°28′32.19″ N., 155°55′19.20″ W. The closure area would be delineated by means of six marker buoys—one located at each corner and one located at the middle of each of the lengthwise boundaries. Informational signs would be placed on shore to inform the public of the closure areas. The closure encompasses approximately 0.08 mi^2 (0.21 km^2) of essential daytime habitat used by Hawaiian spinner dolphins.

The County of Hawaii identifies two public access points on Boulder Beach and Napoopoo Landing at Kealakekua Bay; both points would remain open for access. Additionally, the route used by kayakers to access the Captain Cook Monument at Kaawaloa from Napoopoo Pier is located outside of the closure area. A line on the map going across the bay depicts this route.

Honaunau Bay. The lines between points A, B, and C shown in Figure 3 illustrate the marine boundaries for the time-area closure for Honaunau Bay; the shoreline boundary is at the mean lower low water line (meaning activities could occur in the intertidal zone) between points A and C. The following geographic coordinates provide the approximate location for each point in Figure 3: (A) 19°25′27.13″ N., 155°54′41.65″ W.; (B) 19°25′21.41″ N., 155°54′58.17″ W.; and (C) 19°25′31.99″ N., 155°54′58.24″ W. The closure site at Honaunau would be delineated by means of a single marker buoy at point B to accommodate local native Hawaiians' requests to honor the sacred nature of this cultural site, and would be aligned with site line markers on shore at points A and C (Figure 3). Informational signs would be placed on shore to inform the public of the closure areas. The closure encompasses approximately 0.04 mi^2 (0.10 km^2) of essential daytime habitat used by Hawaiian spinner dolphins.

The County of Hawaii identifies Honaunau Bay boat ramp as a public access area for this bay. The boat ramp and the popular access point for swimming and snorkeling known as Two-Step are located outside of the closure area, and would remain open for everyday use.

Kauhako Bay. The lines between points A, B, and C shown in Figure 4 illustrate the marine boundaries for the time-area closure for Kauhako Bay; the shoreline boundary is at the mean lower low water line (meaning activities could occur in the intertidal zone) between points A and B. The following geographic coordinates provide the approximate location for each point in Figure 4: (A) 19°37′86.15″ N., 155°89′68.10″ W.; (B) 19°37′91.79″ N., 155°89′95.98″ W.; and (C) 19°37′04.02″ N., 155°89′70.41″ W. A single marker buoy would be placed approximately 35 m from shore to delineate the inner bay closure boundary. Sight line markers at each of the points A, B and C (Figure 4), and two buoys placed along the offshore boundary (line B–C) would delineate the closure area at this bay. Informational signs would be placed on shore to inform the public of the closure areas. The closure encompasses approximately 0.087 mi^2 (0.18 km^2) of essential daytime habitat used by Hawaiian spinner dolphins.

The County of Hawaii identifies Hookena Beach Park as a public access point for this area. The nearshore area located inshore of the line between points A and B would be open for everyday use, including swimming, snorkeling, and freediving.

La Perouse Bay. The lines between points A, B, C and D shown in Figure 5 illustrate the marine boundaries for the time-area closure for La Perouse Bay; the shoreline boundary is at the mean lower low water line (meaning activities could occur in the intertidal zone) between points A and C, and between B and D. The following geographic coordinates provide the approximate location for each point in Figure 5: (A) 20°35′56.90″ N., 156°25′17.04″ W.; (B) 20°35′25.68″ N., 156°24′44.72″ W.; (C) 20°35′39.30″ N., 156°25′33.85″ W.; and (D) 20°35′10.98″ N., 156°24′50.90″ W. A single marker buoy would be placed approximately 100 m offshore of the most popular snorkeling entry point to delineate the nearshore boundary line, with three buoys placed along the offshore boundary line (line C–D) to delineate the outer closure boundary. Shore-based markers at points A, B, C, and D would provide a sightline. Informational signs would be placed on shore to inform the public of the closure areas. The closure encompasses approximately 0.32 mi^2 (0.83 km^2) of resting habitat used by Hawaiian spinner dolphins.

Maui County identifies La Perouse as a public access point for this area (coordinates: 20°36′09.66″ N., 156°25′22.48″ W.). The area inshore of the line between A and B, which includes this access point, would remain open for everyday uses such as surfing, snorkeling, and freediving.

Activities occurring in the intertidal zone (the area that is above water at low tide and under water at high tide), such as shore-based fishing and subsistence gathering, would be able to continue during any time of day in either type of closure.

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Figure 1. Time-Area Closure Depiction, Makako Bay

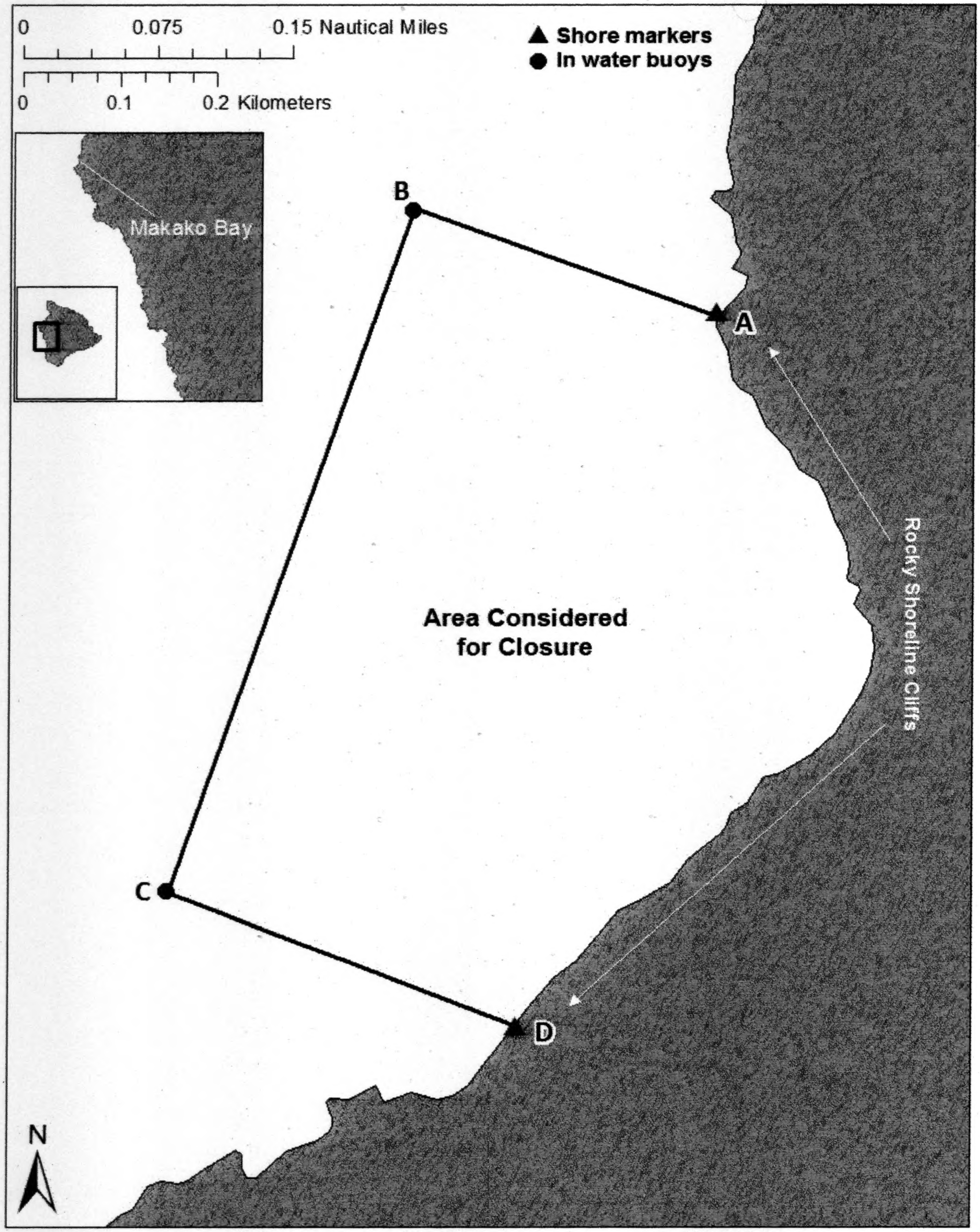

0 0.075 0.15 Nautical Miles
0 0.1 0.2 Kilometers
▲ Shore markers
● In water buoys
Makako Bay
B
A
C
D
Area Considered for Closure
Rocky Shoreline Cliffs
N

Figure 2. Time-Area Closure Depiction, Kealakekua Bay

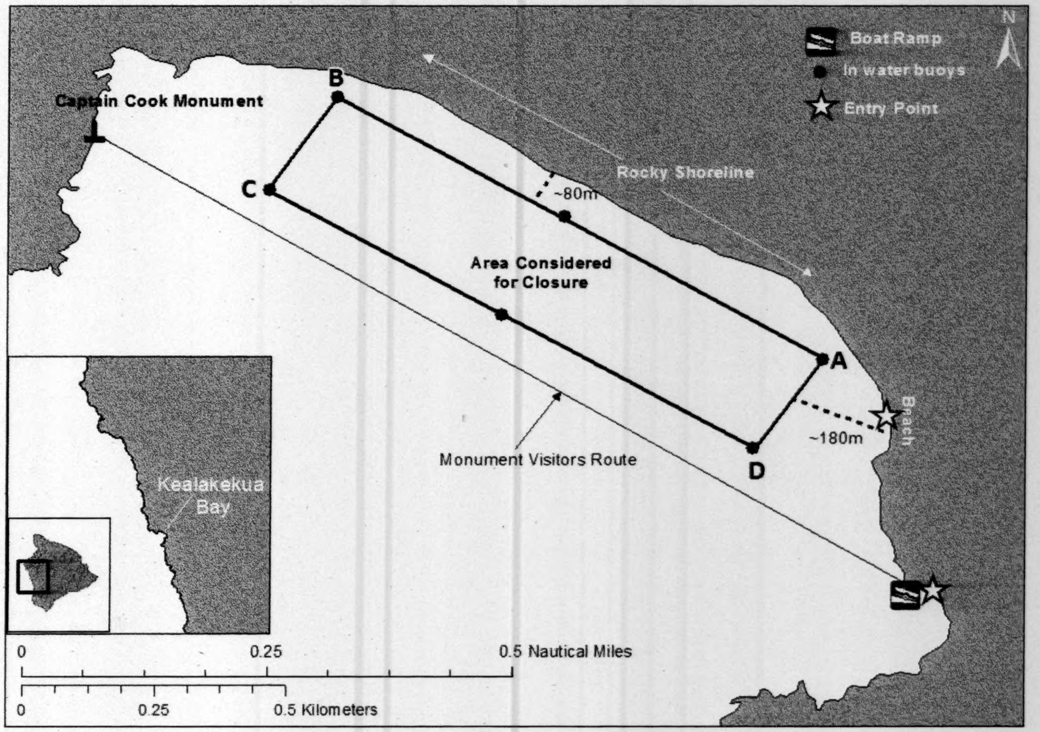

Boat Ramp
In water buoys
Entry Point
N
Captain Cook Monument
B
C
A
D
~80m
~180m
Rocky Shoreline
Area Considered for Closure
Beach
Monument Visitors Route
Kealakekua Bay
0
0.25
0.5 Nautical Miles
0
0.25
0.5 Kilometers

Figure 3. Time-Area Closure Depiction, Honaunau Bay

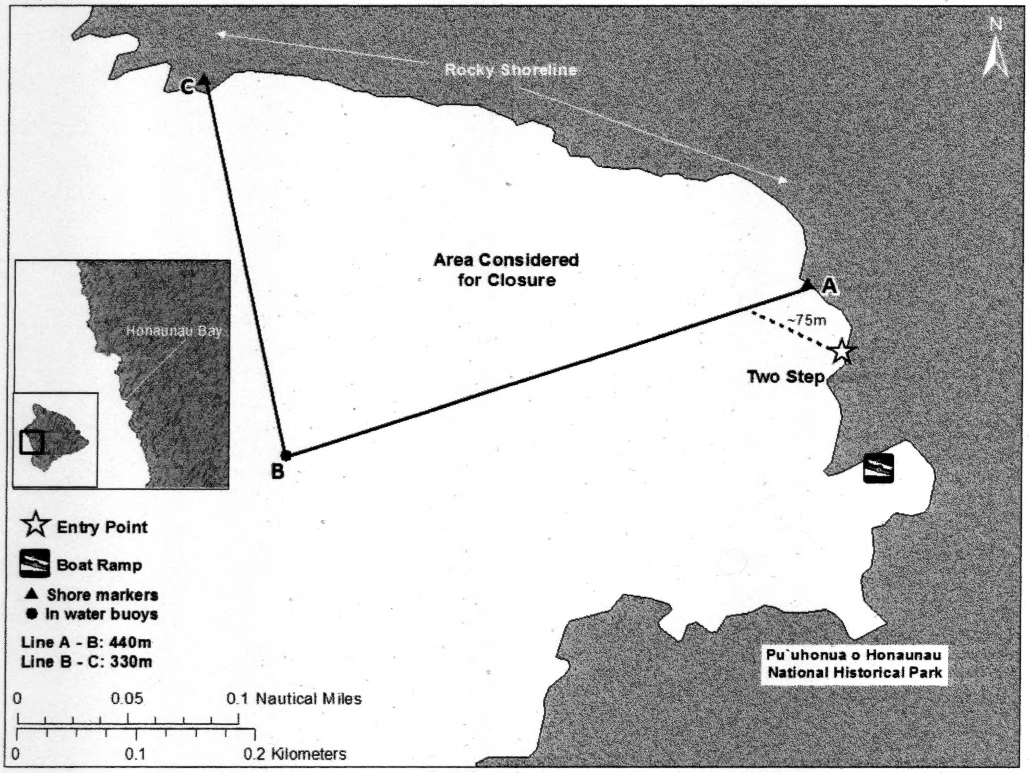

N
Rocky Shoreline
C
A
B
Area Considered for Closure
~75m
Two Step
Honaunau Bay
Pu`uhonua o Honaunau National Historical Park
☆ Entry Point
Boat Ramp
▲ Shore markers
● In water buoys
Line A - B: 440m
Line B - C: 330m
0
0.05
0.1 Nautical Miles
0
0.1
0.2 Kilometers

Figure 4. Time-Area Closure Depiction, Kauhako Bay

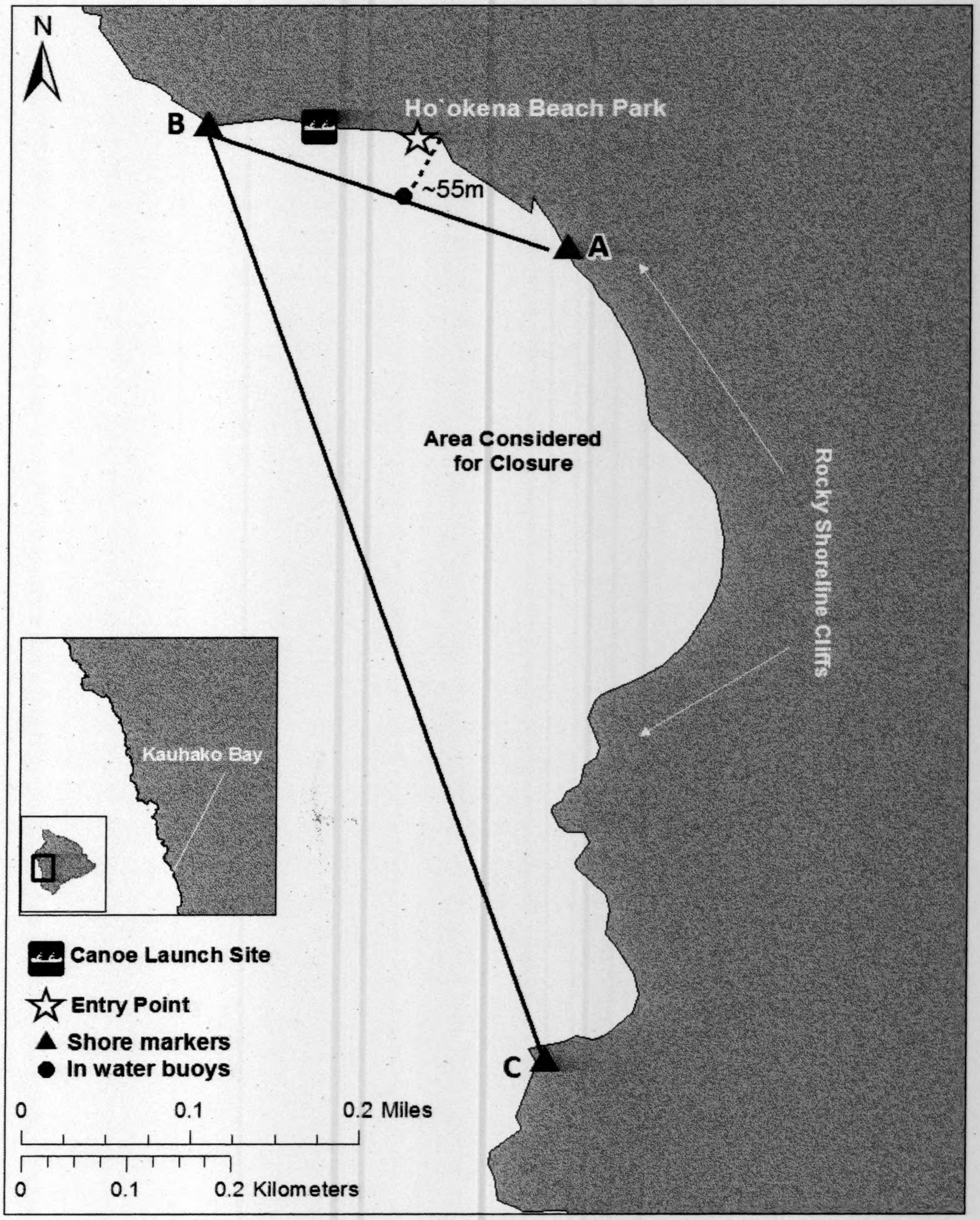
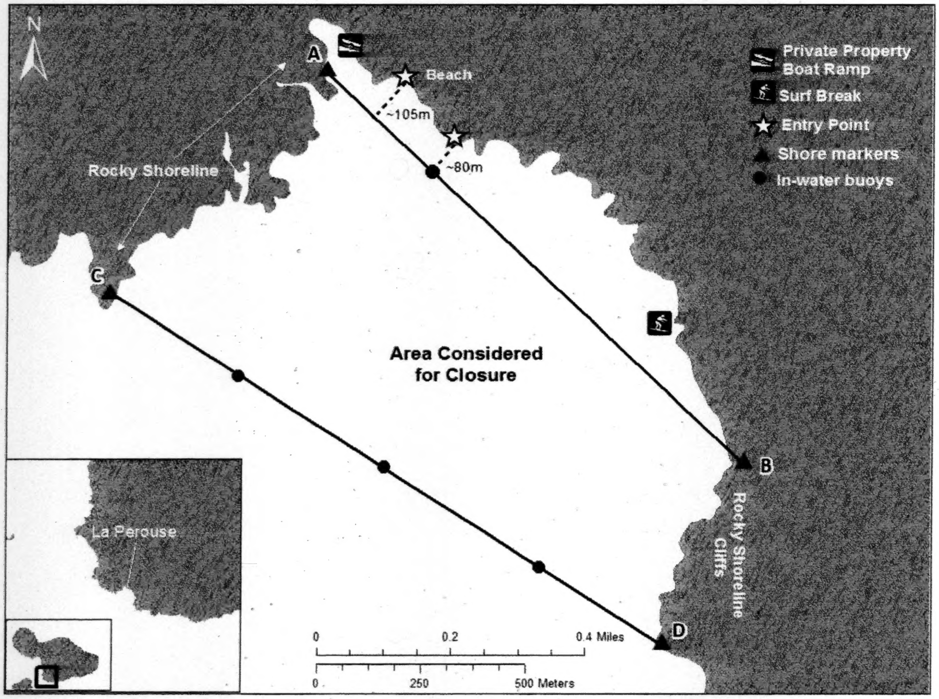

N
B
Ho`okena Beach Park
~55m
A
Area Considered for Closure
Rocky Shoreline Cliffs
Kauhako Bay
C
Canoe Launch Site
Entry Point
Shore markers
In water buoys
0
0.1
0.2 Miles
0
0.1
0.2 Kilometers

Figure 5. Time-Area Closure Depiction, La Perouse Bay



Mandatory Time-Area Closures and Swim-With and Approach Regulations

Although not currently proposed, if we were to implement mandatory time-area closures in addition to promulgating swim-with and approach regulations (described under Alternative 4 in the DEIS), we would create the time-area closures (depicted in Figures 1–5 above) and promulgate regulations that prohibit use of waters within the five delineated areas from 6 a.m. to 3 p.m.. All *Exceptions* (see section above) described for the proposed swim-with and approach regulations would apply to this alternative, and the following three additional exceptions would also apply to the mandatory time-area closures:

(1) Vessels that transit the time-area closure for the sole purpose of ingress and egress to privately-owned shoreline residential property located immediately adjacent to the time-area closure;

(2) Vessels participating in organized community-based outrigger canoe races that transit straight through a time-area closure; and

(3) Vessels that transit straight through the time-area closure for the purpose of traditional subsistence fishing where harvested resources are intended for personal, family, or community consumption or traditional use and not for commercial market sale.

Entering mandatory time-area closures during closed periods would result in a violation unless an exception to the rule applies.

Mandatory time-area closures would prevent take within these important areas and ensure that spinner dolphins are provided space to achieve deep rest during the day. Additionally, regulations to impose these closures would provide a strong tool for enforcement that is measurable and easy to understand, promoting both enforcement and compliance. Under this management option, swim-with and approach regulations would reduce disturbance to Hawaiian spinner dolphins from close approach activities throughout nearshore areas, and mandatory time-area closures would provide additional protection by reducing the intensity of viewing pressure in five essential daytime habitats.

Voluntary Time-Area Closures and Swim-With and Approach Regulations

Although not currently proposed, if we were to implement voluntary time-area closures in addition to promulgating swim-with and approach regulations (Alternative 5 in the DEIS), we would demarcate the same five areas for voluntary time-area closures as are described for the mandatory closures (see *Mandatory Time-Area Closures with Swim-with and Approach Regulation* above). Through outreach, we would ask the public to refrain from using waters within the five delineated areas from 6 a.m. to 3 p.m. Participation in the time-area closures would be voluntary, and no penalties would apply to people or vessels that enter the areas during designated spinner dolphin resting times. The voluntary time-area closures would not apply to any activity that falls within the *Exceptions* (see above) described for the swim-with and approach regulations, or the three additional exceptions described for the mandatory time-area closures option (see three exceptions in the *Mandatory Time-Area Closures and Swim-with and Approach Regulations* section above). Under this alternative, compliance with the time-area closure would be voluntary.

Success with voluntary measures requires strong community engagement and support. Ideally, conservation benefits for Hawaiian spinner dolphins would be the same for mandatory and voluntary closures because both management measures demarcate space for Hawaiian spinner dolphins to engage in resting behaviors. However, we expect that compliance with voluntary measures would be generally lower than compliance with regulations that are enforced (May 2005), and within the five bays, resource users are diverse and have varying motivations and beliefs with regard to Hawaiian spinner dolphin conservation. The lack of a common understanding about the value of these conservation measures may make it difficult to achieve voluntary compliance for the closures. Further, inconsistent compliance with voluntary measures could lead to increased tension between resource user groups that have conflicting views about Hawaiian spinner dolphin conservation.

Additional Measures Eliminated From Consideration

NMFS did not propose some of the regulatory options suggested in the ANPR and in public comments for several reasons, including the measures' inability to meet the purpose and need for this rulemaking (see the DEIS for more detail), difficulties in enforcing them, changes to infrastructure needed to implement them, lack of effectiveness of the measures, lack of resources available to institute them, and the complexity associated with complying with the measures. For example, a permit certification program for all marine operators that engage in some form of dolphin viewing would be inappropriate for addressing chronic and concentrated viewing practices, would require a large processing infrastructure to implement throughout the Hawaiian Islands, and would not address disturbance caused by vessels that are not conducting dolphin tours (*e.g.*, recreational vessels or kayaks). Another suggestion, implementing full closures of all identified resting habitats throughout the Hawaiian Islands, would create many restrictions on activities that are not dolphin-directed, obstruct some harbors, be costly, and require a larger infrastructure to institute and enforce. We discuss these and other regulatory options suggested in public comments in the DEIS for this action.

Public Comments

We are soliciting comments on any aspect of these proposed swim-with and 50-yard (45.7 m) approach regulations. As explained above, NMFS does not propose to implement mandatory or voluntary time-area closures as part of this rulemaking. At this time, NMFS believes that the proposed swim-with and approach regulations will provide adequate protection to spinner dolphins against take, including harassment and disturbances. Should NMFS determine that swim-with and approach regulations provide insufficient protection for Hawaiian spinner dolphins using essential daytime habitats, we would consider additional conservation and management measures, including time-area closures to reduce take in high intensity areas, in a separate rulemaking.

We are particularly interested in comments concerning the following: (1) Effects of the increasing number of human interactions with Hawaiian spinner dolphins; (2) proposed prohibited and exempted activities; (3) whether 50 yards is the most appropriate distance for swim-with and approach restrictions to reduce take of spinner dolphins; (4) whether 100 yards (91.4 m) or another distance is the most appropriate distance for swim-with and approach restrictions to reduce take of spinner dolphins; (5) research recommendations and priorities for better understanding how human disturbance affects Hawaiian spinner dolphins; (6) information on responsible viewing of marine mammals; (7) additional information on spinner dolphin behaviors; (8) other human activities affected by the proposed rule that were not discussed; (9) the temporal and geographic scope (*i.e.*, 2 nm from shore) of the approach regulation; (10) whether the area where the approach regulation is proposed in the Lanai- Maui-Kahoolawe triangle is adequate and appropriate; (11) whether time-area closures are necessary to address the intensity of Hawaiian spinner dolphin-directed activities in some areas; (12) the effectiveness of mandatory versus voluntary closures; (13) the bays and times of day identified for time-area closures; (14) information about other areas where Hawaiian spinner dolphins may face pressures from human viewing and interaction; and (5) suggestions on other areas that should be considered for time-area closures.

Please be aware that all comments received are a part of the public record and will generally be posted for public viewing on *www.regulations.gov* without change. All personal identifying information (*e.g.*, name, address, etc.) submitted voluntarily by the sender will be publicly accessible. Do not submit confidential business information, or otherwise sensitive or protected information. NMFS will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous).

References Cited

A complete list of all references cited in this proposed rule can be found on our Web site at: *http://www.fpir.noaa.gov/PRD/prd_spinner_EIS.html*, or at *www.regulations.gov*, and is available upon request from the NMFS office in Honolulu, Hawaii (see **ADDRESSES**).

Classification

National Environmental Policy Act (NEPA) and Regulatory Impact Review (RIR)

NMFS has prepared a DEIS and an RIR pursuant to NEPA (42 U.S.C. 4321 *et seq.*) and Executive Order (E.O.) 12866, to support this proposed rule. The DEIS/RIR contains a full analysis of a No Action Alternative, five action alternatives, and the Preferred Alternative that we are proposing. There are a number of elements that were common to all of the action alternatives analyzed, including the preferred alternative proposed in this notice, and a number of exceptions that would apply to these alternatives. The DEIS/RIR and supporting documents are available for review and comment and can be found on the NMFS Pacific Islands Region Web site at *http://www.fpir.noaa.gov/PRD/prd_spinner_EIS.html*.

Regulatory Flexibility Act

Under the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996, whenever an agency publishes a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a Regulatory Flexibility Analysis describing the effects of the rule on small entities, *i.e.*, small businesses, small organizations, and small government jurisdictions.

Pursuant to the RFA, NMFS prepared the following Initial Regulatory Flexibility Analysis (IRFA). A description of the action, why it is being considered, and the legal basis for this action are contained in the preamble to this proposed rule. This proposed rule does not duplicate, overlap, or conflict with other Federal rules. The analysis contains a description of and, where feasible, an estimate of the number of, small entities to which the proposed rule will apply. The Small Business Administration (SBA) establishes criteria for defining a "small entity" for purposes of the RFA. This IRFA analyzes the proposed alternatives and other alternatives described in the preamble to the rule, and does not address alternatives previously considered and subsequently dismissed in the DEIS. There are no record-keeping or reporting requirements associated with this proposed rule.

Description and Estimate of the Number of Small Entities to Which the Proposed Rule Applies

There are several types of industries directly affected by this proposed rulemaking: Swim-with-wild-dolphins tour operators; dolphin watch tour operators; non-motorized vessel ocean wildlife viewing tour operators; and generalized commercial boat tour operators. This analysis uses size standards prescribed by the SBA. Specifically, for scenic and sightseeing water transportation operators (North American Industry Classification System Code 487210), the SBA size standard for a small business is average annual receipts of $7.5 million or less. Much of the background information for potentially affected entities is based on a 2007 report that summarized surveys and other information collected in 2006 with regard to participants within these industries that potentially interact with Hawaiian spinner dolphins to varying degrees in the MHI (Impact Assessment 2007). The report provides information that suggests that all businesses operating in the swim-with-wild-dolphins tour and the kayak tour industries operating in 2006 could be considered small entities, and all but one of the generalized commercial boat tour operators were assumed to be small entities (Impact Assessment 2007). This is the most recent information available to NMFS regarding revenue information, but NMFS notes that the composition of these vessel-based tour industries, including the number which can be considered small entities and the total number, may have changed since the report was written.

Swim-with-wild-dolphins tour operators are those that bring clientele into close proximity with spinner dolphins. This includes health and/or spiritual retreat operations as well as dolphin-oriented swim tours. Health and spiritually-linked businesses provide opportunities for persons wishing to interact with spinner dolphins for perceived physical, mental, and/or spiritual well-being enhancement. Spiritually-linked tour operations may charter vessels through other established dolphin-swim companies to transport customers as part of an overall per-person package consisting of lodging, swimming with dolphins, and other activities. For spiritual retreats that offer dolphin swims, the number of businesses is estimated to be as follows: Hawaii (22), Maui (7), Oahu (1), and Kauai (2+).

Dolphin-oriented swim tours operate by transporting passengers by boat or having them swim from shore to areas in which dolphins are known to be present during daytime hours. Customers may also be provided with facemasks, fins, floatation devices, and snorkels to enhance viewing. Recent information compiled by NMFS suggests that the number of swim-with-dolphins tour companies is as follows: Hawaii (22), Maui (2), Oahu (10), and Kauai (1). All are believed to be small entities.

Dolphin-watch tour operators involve taking clients out specifically to view wild dolphins. These companies tend to operate smaller boats than the more generalized commercial boat tours described below, and are more likely to view dolphins at a closer range. Revenue information for this specific business category is not available. NMFS estimates the number of dolphin watch tour businesses to be as follows: Hawaii (3), Maui (21), Oahu (3), and Kauai (11).

More generalized commercial boat tours offer a range of ocean activities, which may include sightseeing, snorkeling, diving, viewing various forms of sea life from a vantage point in and/or above the water, or just generally spending time on the ocean. The majority of the general tour boats derive revenue from whale watching and sightseeing operations, while a number of the dive/snorkel vessels offer snorkeling or diving trips. Based on recent information collected by NMFS, the estimated number of generalized commercial boat tour businesses reportedly involving indirect dolphin interaction is estimated as follows: Hawaii (10), Maui (19), Oahu (36), and Kauai (12). NMFS believes that most, but not all, would be considered small entities.

Non-motorized vessel ocean wildlife viewing tour operators, specifically kayak tour businesses around the MHI, provide a general wildlife viewing experience, with a very small number of operators advertising direct or intentional interactions with dolphins. The number of kayak tour operators who advertise the opportunity to directly interact with wild dolphins is not available. NMFS estimates the numbers of companies that either operate kayak tours or rent out kayaks to be as follows: Hawaii (6), Maui (9), Oahu (6), and Kauai (13).

The estimated numbers of small entities directly affected by the proposed rulemaking, by industry, on the MHI are as follows: 67 swim-with-wild-dolphins tour operators (including health and/or spiritual retreats enabling opportunities to swim with wild dolphins), 77 generalized commercial boat tour operators (one or more of which are likely to be considered large entities), and 34 kayak tour and rental companies.

Economic Impacts to Small Entities Resulting From the Proposed Action (Swim-With and 50-Yard Approach Regulations)

The preferred alternative would restrict all activities associated with close approach to Hawaiian spinner dolphins, including swimming with dolphins and close approach by vessel. These prohibitions would be applicable within 2 nm (3.7 km) of each of the MHI and in designated waters between the islands of Lanai, Maui, and Kahoolawe.

The proposed action to ban swimming and approaching within 50 yards (45.7 m) of Hawaiian spinner dolphins, has the potential to eliminate all commercial activities that result in take of spinner dolphins (*e.g.,* swim-with-wild-dolphins) at a close distance. Therefore, implementing this proposed action would require operators that currently offer the opportunity to swim with spinner dolphins to cease this specific activity, although they may choose to continue to provide other services among their menu of options. For example, a spiritual retreat that offers a menu of other activities along with swim-with-wild-dolphins activities may continue to offer the other activities. In addition, swim-with-wild-dolphins tour operators may choose to transition to operate as a dolphin-watching or generalized tour vessel operation. For these businesses, eliminating opportunities to swim with wild spinner dolphins within 50 yards is likely to result in a reduction in revenue in the short term and potentially in the long term. The decrease in revenue could come from the reduction in the number of customers, specifically those who seek the experience of swimming with spinner dolphins, and/or reduced trip or package prices with a reduced menu of options available for each trip. The loss in overall revenue to individual businesses and the industry as a whole that rely on close approach with spinner dolphins by any means for revenue is uncertain. The same is true with regard to the number of businesses that would be still be able to remain in operation if the proposed regulation is implemented.

Commercial wildlife boat tour operators, including generalized commercial boat tour operators, dolphin watch tour operators, and non-motorized vessel tour operators, would no longer be able to take customers to view Hawaiian spinner dolphins from closer than 50 yards. Restricting operators from approaching within 50 yards of spinner dolphins may reduce demand for vessel-based tours among customers who specifically hope to view dolphins from a vessel at a closer range, although there will be no options other than not taking a tour at all, as no boats in Hawaii would be able to offer tours closer than 50 yards. Some tour operators may be able to offer alternative recreational opportunities or amenities as part of a tour to help offset any loss in demand for tours. For generalized tour boat operators with a clientele base that does not have a specific goal of viewing spinner dolphins, the direct economic impact of the proposed action is likely to be minimal.

NMFS concludes that there would be disproportionate impacts to the swim-with-wild-dolphin tour operators from implementation of this preferred alternative relative to all other general wildlife viewing tour operators. Similarly, because of the focus of activities, it is also likely that the dolphin watch tour industry will face greater impacts than the generalized wildlife tour companies. As a result, dolphin-watch tour entities may face disproportionate impacts relative to the generalized commercial boat tour companies, which are likely to incur few direct economic impacts from the proposed action. We note that dolphin watch tour entities are all believed to be small entities, and most of the generalized commercial boat tour companies are as well, although a few might be considered large entities with revenues exceeding $7.5 million.

NMFS considered other alternatives in addition to the swim-with and 50-yard approach regulations in this proposed rule (*i.e.,* Alternative 3a). These include 1) no action; 2) swim-with regulations; 3b) swim-with and 100-yard (91.4 m) approach regulations; 4) mandatory time-area closures and swim-with and approach regulations; and 5) voluntary time-area closures and swim-with and approach regulations. As is the case for this proposed action, Alternatives 2, 3b, 4, and 5 would all be applicable within 2 nm of each MHI and in designated waters between the islands of Lanai, Maui, and Kahoolawe. Among the non-selected action alternatives, only Alternative 2 (no swimming with Hawaiian spinner dolphins) would result in a lower direct economic impact to small entities. While the restriction on swimming with dolphins would address one threat to Hawaiian spinner dolphin population, this alternative would not address the remaining documented threats to dolphin populations caused by close approach by vessels and other craft. Section 4.2.2 of the DEIS provides more detail. The remaining non-selected action alternatives would most likely result in a higher economic impact to individual small entities and the dolphin-viewing industry as a whole, relative to the preferred alternative of this proposed action. NMFS has determined that the proposed action meets the goals and objective of reducing human-caused disturbances that Hawaiian spinner dolphins are facing in their natural habitat, and helps protect against declines in the fitness of the population over time.

No additional reporting, record keeping, and other compliance requirements are anticipated for small businesses. NMFS has identified no Federal rules that may duplicate, overlap, or conflict with the action alternatives.

Executive Order 12866

This proposed rule was determined to be not significant for purposes of E.O. 12866.

Paperwork Reduction Act

The purpose of the Paperwork Reduction Act is to minimize the paperwork burden for individuals, small businesses, educational and nonprofit institutions, and other persons resulting from the collection of information by or for the Federal government. The preferred alternative includes no new collection of information, so further analysis is not required.

National Historic Preservation Act (NHPA)

The goal of the National Historical Preservation Act (NHPA; 16 U.S.C. 470 *et seq.*) is to have Federal agencies act as responsible stewards of our nation's resources when their actions affect historic properties. Section 106 of the NHPA requires Federal agencies to take into account the effects of undertakings they carry out, assist, fund, or permit on historic properties. Federal agencies meet this requirement by completing the section 106 process set forth in the implementing regulations, "Protection of Historic Properties," 36 CFR part 800. The goal of the section 106 process is to identify and consider historic properties (or sites eligible for listing) that might be affected by an undertaking, and to attempt to resolve any adverse effects through consultation. The process provides for participation by State Historic Preservation Officers, Tribal Historic Preservation Officers, tribal, state and local governments, Indian tribes and Native Hawaiian organizations, applicants for Federal assistance, permits, or licenses, representatives from interested organizations, private citizens, and other members of the public. Federal agencies and consulting parties strive to reach agreement on measures to avoid, minimize, and mitigate adverse effects on historic properties and to find a balance between project goals and preservation objectives.

Under the NHPA, an "effect" means an alteration to the characteristics of a historic property qualifying it for inclusion or eligibility for the National Register. The proposed swim-with and approach regulations for Hawaiian spinner dolphins, if finalized, would not have the potential to cause effects on or alterations to the characteristics of historic properties. Therefore, section 106 consultation is not required.

Coastal Zone Management Act

Section 307(c)(1) of the Federal Coastal Zone Management Act of 1972 requires that all Federal activities that affect any land or water use or natural resource of the coastal zone be consistent with approved state coastal zone management programs to the maximum extent practicable. We have determined that these proposed swim-with and approach regulations are consistent to the maximum extent practicable with the enforceable policies of the approved Coastal Zone Management Program of Hawaii. This determination, a copy of this document, and the DEIS will be submitted for review by the Hawaii Coastal Zone Management Program.

Executive Order 13132, Federalism

E.O. 13132 requires agencies to take into account any federalism impacts of regulations under development. It includes specific consultation directives for situations in which a regulation may preempt state law or impose substantial direct compliance costs on state and local governments (unless required by statute). NMFS has determined that the proposed swim-with and approach regulations do not have federalism implications.

Information Quality Act (IQA)

Pursuant to Section 515 of Public Law 106–554 (the Information Quality Act), this information product has undergone a pre-dissemination review by NMFS. The signed Pre-dissemination Review and Documentation Form is on file with the NMFS Pacific Islands Regional

Office (see **FOR FURTHER INFORMATION CONTACT**).

List of Subjects in 50 CFR Part 216

Administrative practice and procedure, Marine mammals.

Dated: August 19, 2016.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 216 is proposed to be amended as follows:

PART 216—REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

■ 1. The authority citation for part 216 continues to read as follows:

Authority: 16 U.S.C. 1361 *et seq.*

■ 2. Add § 216.20 to subpart B to read as follows:

§ 216.20 Special restrictions for Hawaiian spinner dolphins.

(a) *Applicability.* The following special restrictions designed to protect Hawaiian Spinner Dolphins apply:

(1) In all waters within 2 nautical miles of the main Hawaiian Islands, and

(2) In all waters located between the islands of Lanai, Maui, and Kahoolawe enclosed by three line segments that connect points on the 2-nautical mile boundary between the islands as follows: the straight line between 20°32′51″ N./156°43′50″ W. and 20°42′4″ N./156°55′34″ W. between Kahoolawe and Lanai, the straight line between 20°51′1″ N./156°54′0″ W. and 20°59′48″ N./156°42′28″ W. between Lanai and Maui, and the straight line between 20°33′55″ N./156°26′43″ W. and 20°32′15″ N./156°29′51″ W. between Maui and Kahoolawe (all coordinates referenced to The World Geodetic System of 1984 (WGS 84)).

(b) *Prohibitions.* Except as noted in paragraph (c) of this section, it is unlawful for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or to cause to be committed any of the following:

(1) Approach or remain within 50 yards of a Hawaiian spinner dolphin by any means;

(2) Swim within 50 yards of a Hawaiian spinner dolphin;

(3) Cause a vessel, person, or other object to approach or remain within 50 yards of a Hawaiian spinner dolphin; or

(4) Intercept or place a vessel, person, or other object on the path of a Hawaiian spinner dolphin so that the dolphin approaches within 50 yards of the vessel, person, or object.

(c) *Exceptions.* The prohibitions of paragraph (b) of this section do not apply to:

(1) Any person who inadvertently comes within 50 yards of a Hawaiian spinner dolphin or is approached by a spinner dolphin, provided the person makes no effort to engage or pursue the animal and takes immediate steps to move away from the animal;

(2) Any vessel that is underway and is approached by a Hawaiian spinner dolphin, provided the vessel continues normal navigation and makes no effort to engage or pursue the animal;

(3) Any vessel transiting to or from a port, harbor, or in a restricted channel when a 50-yard distance will not allow the vessel to maintain safe navigation;

(4) Vessel operations necessary to avoid an imminent and serious threat to a person or vessel;

(5) Activities authorized through a permit or authorization issued by the National Marine Fisheries Service to take Hawaiian spinner dolphins; and

(6) Federal, State, or local government vessels, aircraft, personnel, and assets when necessary in the course of performing official duties.

(d) *Affirmative defense.* In connection with any action alleging a violation of this section, any person claiming the benefit of any exemption, exception, or permit listed in paragraph (c) of this section has the burden of proving that the exemption or exception is applicable, or that the permit was granted and was valid and in force at the time of the alleged violation.

(e) *Maps of areas for Hawaiian spinner dolphin special restrictions.* The following are overview maps and a table with corresponding coordinate data for the areas for Hawaiian spinner dolphin special restrictions.

Figure 1. Overview of Area of Proposed Spinner Dolphin Protections

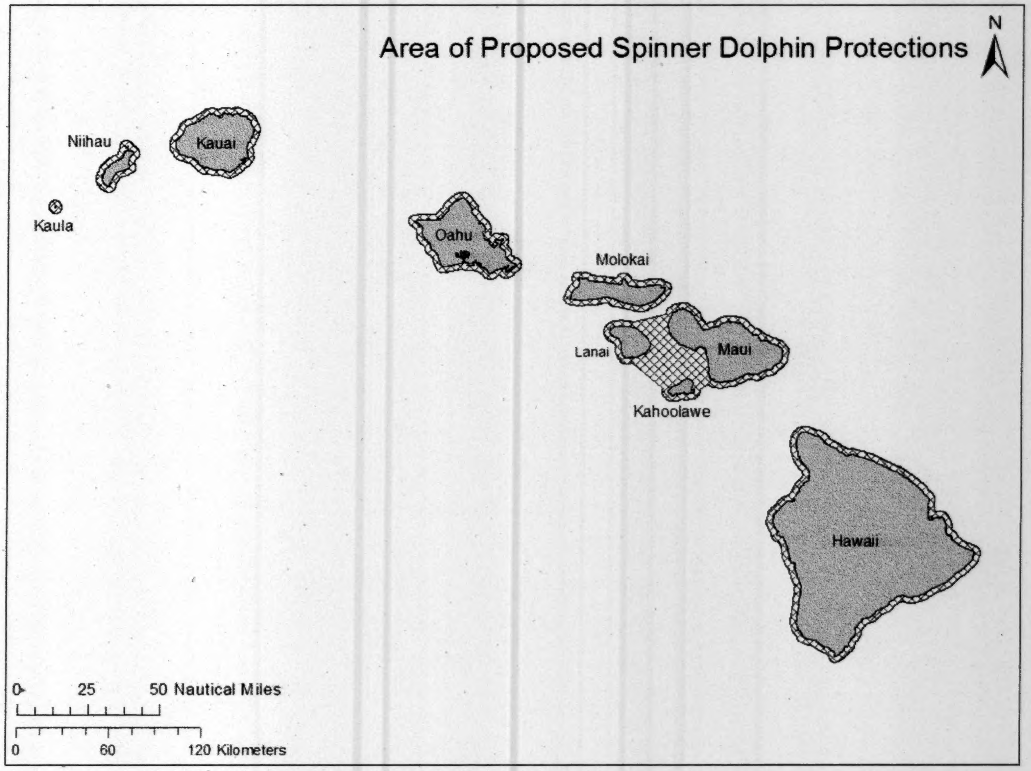

Area of Proposed Spinner Dolphin Protections
N
Niihau
Kauai
Kaula
Oahu
Molokai
Lanai
Maui
Kahoolawe
Hawaii
0 25 50 Nautical Miles
0 60 120 Kilometers

Figure 2. Overview of Designated Waters Between Lanai, Maui, and Kahoolawe for Proposed Spinner Dolphin Protections. See Table 1 for coordinates.

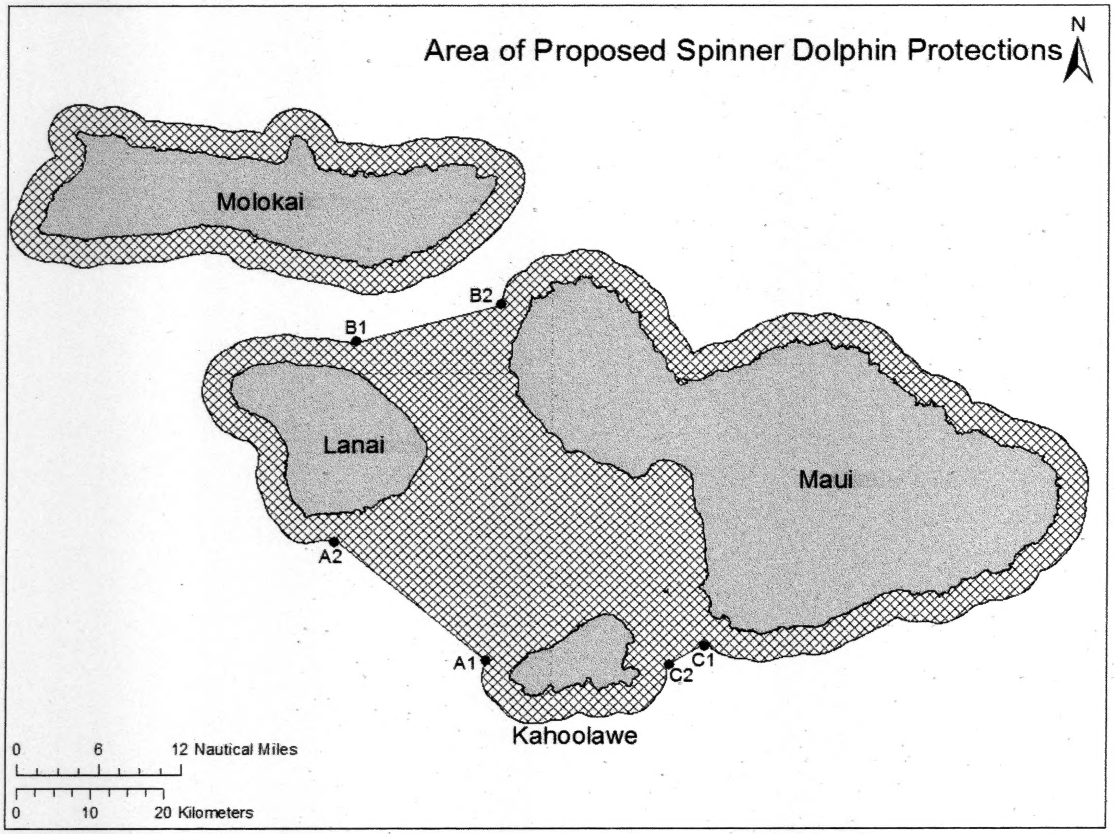

Area of Proposed Spinner Dolphin Protections
N
Molokai
B2
B1
Lanai
Maui
A2
A1
C1
C2
Kahoolawe
0
6
12 Nautical Miles
0
10
20 Kilometers

TABLE 1—COORDINATES FOR THE EXTENT OF THE DESIGNATED WATERS BETWEEN LANAI, MAUI, AND KAHOOLAWE (SEE FIGURE 2)

[All coordinates referenced to The World Geodetic System of 1984 (WGS 84)]

Line segment between islands	Figure 2 label	Latitude	Longitude
Kahoolawe and Lanai	A1	20°32′51″ N.	156°43′50″ W.
	A2	20°42′4″ N.	156°55′34″ W.
Lanai and Maui	B1	20°51′1″ N.	156°54′0″ W.
	B2	20°59′48″ N.	156°42′28″ W.
Maui and Kahoolawe	C1	20°33′55″ N.	156°26′43″ W.
	C2	20°32′15″ N.	156°29′51″ W.

[FR Doc. 2016–20324 Filed 8–23–16; 8:45 am]

BILLING CODE 3510–22–C

Notices

Federal Register
Vol. 81, No. 164
Wednesday, August 24, 2016

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

[Docket No. AMS–LPS–16–0060]

United States Standards for Grades of Carcass Beef

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Notice, request for comments.

SUMMARY: The Agricultural Marketing Service (AMS) of the Department of Agriculture (USDA) is seeking public comments on a petition requesting revision to the United States Standards for Grades of Carcass Beef. Specifically, AMS is requesting comments concerning a petition that requests that the beef standards be amended to include dentition and documentation of actual age as an additional determination of maturity grouping for official quality grading. Currently, the standards only include skeletal and muscular evidence as a determination of maturity grouping for the purposes of official quality grading. Official quality grading is used as an indication of meat palatability and is a major determining factor in live cattle and beef value.

DATES: Submit comments on or before October 24, 2016.

ADDRESSES: Comments should be sent to Beef Carcass Revisions, Standardization Branch, Quality Assessment Division; Livestock Poultry and Seed Program, Agricultural Marketing Service, U.S. Department of Agriculture, 1400 Independence Ave. SW., Room 3932–S, STOP 0258, Washington, DC 20250–0258. Comments may also be sent by fax to (202) 690–2746 or by email to *beefcarcassrevisions@ams.usda.gov.*

FOR FURTHER INFORMATION CONTACT: For additional information, please contact Bucky Gwartney, International Marketing Specialist, Quality Assessment Division, at *bucky.gwartney@ams.usda.gov* or (202) 720–1424.

SUPPLEMENTARY INFORMATION: Section 203(c) of the Agricultural Marketing Act of 1946, as amended, directs and authorizes the Secretary of Agriculture "to develop and improve standards of quality, condition, quantity, grade, and packaging and recommend and demonstrate such standards in order to encourage uniformity and consistency in commercial practices." AMS is committed to carrying out this authority in a manner that facilitates the marketing of agricultural commodities and makes copies of official standards available upon request. The United States Standards for Grades of Carcass Beef do not appear in the Code of Federal Regulations but are maintained by USDA. These standards are located on USDA's Web site at: *https://www.ams.usda.gov/sites/default/files/media/Carcass%20Beef%20Standard.pdf.* To change the United States Standards for Grades of Carcass Beef, AMS plans to utilize the procedures it published in the August 13, 1997, **Federal Register**, and that appear in part 36 of title 7 of the Code of Federal Regulations (7 CFR part 36).

Background

The Federal beef grade standards and associated voluntary, fee-for-service beef grading service program are authorized under the Agricultural Marketing Act of 1946, as amended (7 U.S.C. 1621 *et seq.*). The primary purpose of Federal grade standards, including the Federal beef grade standards, is to divide the population of a commodity into uniform groups (of similar quality, yield, value, etc.) to facilitate marketing. In concert, the Federal voluntary, fee-for-service grading program is designed to provide an independent, objective determination as to if a given product is in conformance with the applicable official Federal standard. In the case of beef, when it is voluntarily graded to the Federal beef grade standards under the beef grading service, the official grade consists of a quality grade and/or a yield grade.

The quality grades are intended to identify differences in the palatability or eating satisfaction of cooked beef principally through the characteristics of marbling and physiological maturity groupings. As noted in the standards referenced above, the principal official USDA quality grades for young (maturity groups "A" and "B") cattle and carcasses are Prime, Choice, and Select, in descending order in terms of historic market value. USDA recognizes that the beef standards must be relevant to be of greatest value to stakeholders and, therefore, recommendations for changes in the standards may be initiated by USDA or by interested parties at any time to achieve that goal.

For beef, USDA quality grades provide a simple, effective means of describing product that is easily understood by both buyers and sellers. By identifying separate and distinct segments of beef, grades enable buyers to obtain that particular kind of beef that meets their individual needs. For example, certain restaurants may choose to only sell officially graded USDA Prime beef so as to provide their customers with a product that meets a very consistent level of overall palatability. At the same time, grades are important in transmitting information to cattlemen to help ensure informed decisions are made. For example, the market preference and price paid for a particular grade of beef is communicated to cattle producers so they can adjust their production accordingly. In such a case, if the price premium being paid for a grade such as USDA Prime beef merits producers making the investments required in cattle genetics and feeding to produce more USDA Prime beef, such marketing decisions can be made with justification.

The current beef standards do not utilize dentition or age verification as methods to determine maturity groupings and instead rely solely on skeletal and lean (physiological) maturity. Although never intended to be a definitive method to determine the age of cattle at the time of slaughter and instead utilized to predict beef palatability, the maturity groupings have historically been roughly correlated to different age categories. Maturity grouping A was correlated with beef from cattle between 9 and 30 months of age at time of slaughter, maturity grouping B was correlated with beef from cattle between 30 and 42 months of age at time of slaughter, maturity grouping C was correlated with beef from cattle between 42 and 72 months of age at time of slaughter, maturity grouping D was correlated with beef from cattle between 72 and 96 months of age at time of slaughter, and maturity grouping E was correlated with beef from cattle more than 96 months of age at time of slaughter. However, these are rough approximations that are influenced by other factors including diet, growth promotion administration, calving, breed, and a variety of environmental factors. Therefore, cattle that are younger than 30 months of age (MOA) may have a physiological maturity of B or greater beef quality grade maturity grouping due to other factors listed above.

The current use of dentition to determine animal age at time of slaughter is done on all slaughtered cattle in order to determine whether their age is less than or greater than 30 MOA due to food safety requirements. Cattle older than 30 MOA must have specific risk materials (*e.g.*, vertebral column) removed from their carcasses before the sale of the resulting beef cuts. Age verification involves providing the paper paperwork or other proof of an animals' actual age (*i.e.*, less than 30 MOA) and is also used for a variety of purposes including meeting foreign market requirements for U.S. beef from cattle under a certain age.

The official standards have had past revisions made to the maturity grouping requirements, and these revisions resulted in classifications that were designed to reduce the variability of eating quality within the grades. The most recent such change occurred in 1997 when certain carcasses from the B maturity grouping were no longer eligible for the USDA Choice or Select quality grades. However, the official standards have never relied upon any other indicator besides physiological maturity to determine maturity grouping or the resulting USDA quality grade. This was primarily because the use of physiological maturity wasn't intended to be used to predict the age of an animal at time of slaughter but, instead, the resulting palatability of the meat. Many years of research have demonstrated a strong correlation between physiological maturity and beef palatability.

However, current research has indicated that carcasses from grain-fed steers and heifers that are deemed less than 30 MOA, based on dentition, are similar in palatability to A maturity carcasses determined via physiological maturity and thus could be classified "A" maturity for grading purposes even though the physiological maturity characteristics of "B" or older maturity groupings may be present. Utilizing the recommendations of dentition and age verification would allow for an alternate method of classifying beef carcasses into maturity groupings and thus allow additional carcasses to qualify for the higher USDA grades of Prime, Choice and Select without a significant reduction in the consistency of those grades in predicting palatability.

AMS was provided a large data set from a recent study of beef packing plant slaughter and has performed a statistical and economic analysis on this data in order to determine the possible impact should the proposed change to the Standards be adopted. That report can be found here: *https://www.ams.usda.gov/grades-standards/beef-request-for-comments.* The study period ranged from the beginning of May 2014 through the end of April 2015, and the results are summarized below.

Extrapolating the study data across the total population of cattle graded each year by AMS—approximately 21 million—results in the following:

- Seventy-two percent were slaughtered in facilities participating in the study,
- Ninety-seven percent were found to be less than 30 MOA using dentition,
- Less than 3 percent (2.8) were found to be equal to or greater than 30 MOA,
- Less than 2 percent (1.68) were deemed to be age-discounted when using skeletal ossification as the measure of maturity grouping, and
- Less than one-half of 1 percent of the total cattle graded were age-verified.

According to the study, had there been an allowance to use dentition as a means to override physiological characteristics of advanced maturity grouping, as is proposed, an additional 1.3 percent of those cattle would have been eligible for grading. Of these cattle, 4.5 percent would have been graded Prime, 63.6 percent Choice, and 31.9 percent Select. Within the Choice category, 24.4 percent of all newly graded carcasses, would have been placed in the top two-thirds Choice category (branded Choice programs), and 39.2 percent of all added carcasses would have been placed in the bottom of the Choice category. Currently, many private companies or organizations have established carcass schedules whereby AMS graders evaluate individual carcasses for conformance with those established requirements—things such as breed or breed influence, age, ribeye size, carcass weight. Most of those carcass programs (*e.g.*, Certified Angus Beef™) currently have requirements for only allowing "A Maturity" carcasses.

The grade composition of the carcasses being added by using dentition as a measure of age was not much different than the grade composition of carcasses graded using physiological maturity, and overall, these data show an increase of 1.05 percent for Prime beef, 0.91 percent for Choice[1] and 1.29 percent for Select. According to calculations made from wholesale beef elasticity, wholesale beef prices could decline between 1 to 1.5 percent for each of the grade categories as a result of the increased supply of graded beef.

According to projections provided by the National Cattlemen's Beef Association (NCBA), producers would yield approximately $59 million in added revenue from removal of discounts for cattle identified as greater than A maturity grouping that dentition would allow to be classified as such. AMS found a net gain to producers of nearly $55 million, primarily due to reduced hard bone discounts for quality grade maturity grouping done by the current physiological maturity approach alone.

A petition has been submitted by NCBA, the National Association State Departments of Agriculture, the U.S. Meat Export Federation, and the American Farm Bureau Federation and can be found here: *https://www.ams.usda.gov/grades-standards/beef-request-for-comments.*

The petitioners cite several research papers, as listed in the reference section at the above link, to support their request. Two of the summary papers that outline the relevant studies can be found here: *https://www.ams.usda.gov/grades-standards/beef-request-for-comments.* In summary, the studies showed that the use of dentition to determine maturity groupings did not have a significant negative affect on the ability of the official USDA quality grades to group beef into similar palatability categories while at the same time would allow for additional carcasses to qualify for the higher USDA quality grades of Prime, Choice and Select. This would allow for consumers to have access to additional USDA Prime, Choice and Select beef as well as for producers to be paid price premiums for cattle whose carcasses grade USDA Prime, Choice or Select.

In addition, a recent analysis located at: *https://www.ams.usda.gov/grades-standards/beef-request-for-comments,* which was done by the American Meat Science Association's Committee on Grading, found that while age at the time of slaughter does influence meat palatability, this becomes less influential within the young U.S. grain-fed cattle population, as the vast majority of cattle presented for grading in U.S. beef processing facilities are less than 30 MOA and USDA "A" or "B" maturity. It is important to note that the population of fed beef cattle in the U.S. has changed significantly over the last several decades. Today, there is greater consistency within the cattle herd, improved genetics, a relatively young slaughter population, more widespread use of growth promoting technologies that are known to effect bone ossification, and much higher carcass weights at slaughter which may also have skeletal implications. These market and production changes, along with recent research, could indicate that physiological maturity is less influential on palatability than in the past.

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[1] While the volume of Choice carcasses added is large, the existing production of Choice beef is significantly large enough to result is a smaller proportion of Choice added than for Prime and Select.

Request for Comments

AMS is soliciting comments from stakeholders about whether changes in the methodology for determining maturity grouping assessment for the purposes of official USDA quality grading should be made. This change would have no effect on the role that maturity groupings have upon USDA quality grade determination, simply how carcasses are placed into those maturity groupings. AMS also invites comments about how those changes would be implemented in the current beef grading system. If, after analyzing the comments, AMS determines that changes are warranted, a notice will be published in the **Federal Register** proposing specific changes to the United States Standards for Carcass Beef. Interested parties will have an opportunity to comment prior to a final decision adopting any changes.

Dated: August 19, 2016.

Elanor Starmer,

Administrator, Agricultural Marketing Service.

[FR Doc. 2016–20254 Filed 8–23–16; 8:45 am]

BILLING CODE 3410–02–P

DEPARTMENT OF AGRICULTURE

Food Safety and Inspection Service

[Docket No. FSIS–2016–0027]

Statements That Bioengineered or Genetically Modified (GM) Ingredients or Animal Feed Were Not Used in the Production of Meat, Poultry, or Egg Products

AGENCY: Food Safety and Inspection Service, USDA.

ACTION: Notice of availability and opportunity for comment.

SUMMARY: The Food Safety and Inspection Service (FSIS) is announcing the availability of the Agency's compliance guidance on how companies can make label or labeling claims concerning the fact that bioengineered or genetically modified (GM) ingredients or animal feed were not used in the production of meat, poultry, or egg products. For purposes of this guidance document, these claims will be referred to as "negative claims."

DATES: Comments must be received by October 24, 2016.

ADDRESSES: A downloadable version of the compliance guidance is available to view and print at *http://www.fsis.usda.gov/wps/portal/fsis/topics/regulatory-compliance/labeling/claims-guidance/procedures-nongenetically-engineered-statement.* No hard copies of the compliance guidance have been published.

FSIS invites interested persons to submit comments on this notice. Comments may be submitted by one of the following methods:

Federal eRulemaking Portal: This Web site provides the ability to type short comments directly into the comment field on this Web page or attach a file for lengthier comments. Go to *http://www.regulations.gov/.* Follow the on-line instructions at that site for submitting comments.

Mail, including CD–ROMs: Send to Docket Clerk, U.S. Department of Agriculture, Food Safety and Inspection Service, Patriots Plaza 3, 1400 Independence Avenue SW., Mailstop 3782, Room 8–163B, Washington, DC 20250–3700.

Hand- or courier-delivered submittals: Deliver to Patriots Plaza 3, 355 E Street SW., Room 8–163A, Washington, DC 20250–3700.

Instructions: All items submitted by mail or electronic mail must include the Agency name, docket number FSIS–2016–0027, and the document title: Statements that Bioengineered or Genetically Modified (GM) Ingredients or Animal Feed Were not Used in the Production of Meat, Poultry, or Egg Products. Comments received in response to this docket will be made available for public inspection and posted without change, including any personal information, to *http://www.regulations.gov.*

For additional information about FSIS labeling policies and programs, including Generic Label Approval, please review the FSIS Web site at: *http://www.fsis.usda.gov/wps/portal/fsis/topics/regulatory-compliance/labeling/* or contact the Labeling and Program Delivery Staff at (301) 504–0878 or (301) 504–0879.

Docket: For access to background documents or to comments received, go to the FSIS Docket Room at Patriots Plaza 3, 355 E Street SW., Room 164–A, Washington, DC 20250–3700 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

FOR FURTHER INFORMATION CONTACT: Dr. Daniel L. Engeljohn, Assistant Administrator, Office of Policy and Program Development; Telephone: (202) 205–0495.

SUPPLEMENTARY INFORMATION:

Background

FSIS is the public health regulatory agency in the USDA that is responsible for ensuring that the nation's commercial supply of meat, poultry, and egg products is safe, wholesome, and accurately labeled and packaged. FSIS develops and implements regulations and policies to ensure that meat, poultry, and egg product labeling is not false or misleading. Under the Federal Meat Inspection Act (FMIA) (21 U.S.C. 601–695, at 607), the Poultry Products Inspection Act (PPIA) (21 U.S.C. 451–470, at 457), and the Egg Products Inspection Act (21 U.S.C. 1031–1056, at 1036) the labels of meat, poultry, and egg products must be approved by the Secretary of Agriculture, who has delegated this authority to FSIS, before these products can enter commerce.

Compliance Guide

FSIS is announcing that it has developed a compliance guide for companies that seek to make label or labeling claims concerning the fact that bioengineered or GM ingredients were not used in a meat, poultry or egg product. This guidance also provides information on how companies can make label or labeling claims that a product was produced from livestock or poultry that were not fed bioengineered or GM feed. For purposes of this guidance document, these claims will be referred to as "negative claims."

FSIS has approved negative claims through its prior label approval process. Because FSIS does not have the ability to independently verify negative claims for ingredients or feed, FSIS has required establishments that make these claims to comply with standards established by a third-party certifying organization. FSIS currently requires that the third-party certifying organization's standards be publicly available on a Web site and the label or labeling disclose the Web site address of the third-party certifying organization. FSIS currently requires that the establishment demonstrate that its claims of third-party certification are truthful and not misleading.

As a policy matter, prior to issuing this guidance document, FSIS has not allowed the use of the terms "genetically modified organism" or "GMO" in negative claims. FSIS has allowed the use of the terms "genetically modified organism" or "GMO" on product labels or labeling only if the name of the third-party certifying organization contains these terms (*e.g.* "Non-GMO Project"). However, recent legislation was enacted (Pub L 114–216) requiring the Secretary of Agriculture to develop and implement a mandatory national bioengineered food disclosure standard within 2 years. This legislation also addresses negative claims, providing that "a food may not be considered to be 'not bioengineered' or 'non-GMO', or any other similar claim describing the absence of bioengineering in the food solely because the food is not required to bear a disclosure that the food is bioengineered under this subtitle." (Pub. L. 114–216, section 294(c)). Therefore, FSIS has reconsidered its position and will allow the use of the terms "genetically modified organism" or "GMO" in negative claims provided that the label or labeling is otherwise truthful and not misleading.

Effective immediately, FSIS will begin approving negative claims for meat, poultry and egg products that do not contain bioengineered ingredients or that are derived from livestock that do not consume bioengineered feed and that contain the terms "genetically modified organism" or "GMO". In evaluating such claims, FSIS will utilize the definition of "bioengineering" in Public Law 114–216. In that law, the term "bioengineering" refers to a food that contains genetic material that has been modified through in vitro recombinant deoxyribonucleic acid (DNA) techniques and for which the modification could not otherwise be obtained through conventional breeding or found in nature.

Consistent with past practice, FSIS will continue to allow the use of synonymous terms such as "genetically engineered." If FSIS has approved an organic claim on the product label, establishments may add an applicable negative claim of the kind discussed in the guidance.

FSIS encourages companies to follow this guidance. This guidance represents FSIS's current thinking, and FSIS welcomes comment on this compliance guidance and will update it as necessary to reflect comments received and any additional information that becomes available.

USDA Nondiscrimination Statement

No agency, officer, or employee of the USDA shall, on the grounds of race, color, national origin, religion, sex, gender identity, sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, or political beliefs, exclude from participation in, deny the benefits of, or subject to discrimination, any person in the United States under any program or activity conducted by the USDA.

To file a complaint of discrimination, complete the USDA Program Discrimination Complaint Form, which may be accessed online at: *http://www.ocio.usda.gov/sites/default/files/docs/2012/Complain_combined_6_8_12.pdf,* or write a letter signed by you or your authorized representative.

Send your completed complaint form or letter to USDA by mail, fax, or email:

Mail: U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue SW., Washington, DC 20250–9410.

Fax: (202) 690–7442.

Email: program.intake@usda.gov.

Persons with disabilities who require alternative means for communication (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720–2600 (voice and TDD).

Additional Public Notification

Public awareness of all segments of rulemaking and policy development is important. Consequently, in an effort to ensure that minorities, women, and persons with disabilities are aware of this notice, FSIS will announce it online through the FSIS Web page located at *http://www.fsis.usda.gov/wps/portal/fsis/topics/regulations/federal-register/federal-register-notices.* FSIS also will make copies of this **Federal Register** publication available through the FSIS Constituent Update, which is used to provide information regarding FSIS policies, procedures, regulations, **Federal Register** notices, FSIS public meetings, recalls, and other types of information that could affect or would be of interest to constituents and stakeholders. The update is communicated via Listserv, a free electronic mail subscription service for industry, trade and farm groups, consumer interest groups, allied health professionals, and other individuals who have asked to be included. The update is available on the FSIS Web page. Through the Listserv and Web page, FSIS is able to provide information to a much broader and more diverse audience. In addition, FSIS offers an email subscription service which provides automatic and customized access to selected food safety news and information. This service is available at *http://www.fsis.usda.gov/subscribe.* Options range from recalls to export information to regulations, directives and notices. Customers can add or delete subscriptions themselves and have the option to password protect their account.

Done at Washington, DC, on August 19, 2016.

Alfred V. Almanza,

Acting Administrator.

[FR Doc. 2016–20227 Filed 8–23–16; 8:45 am]

BILLING CODE 3410–DM–P

DEPARTMENT OF AGRICULTURE

Foreign Agricultural Service

Assessment of Fees for Dairy Import Licenses for the 2017 Tariff-Rate Import Quota Year

AGENCY: Foreign Agricultural Service, USDA.

ACTION: Notice.

SUMMARY: This notice announces a fee of $250 to be charged for the 2017 tariff-rate quota (TRQ) year for each license issued to a person or firm by the Department of Agriculture authorizing the importation of certain dairy articles, which are subject to tariff-rate quotas set forth in the Harmonized Tariff Schedule (HTS) of the United States.

DATE: August 24, 2016.

FOR FURTHER INFORMATION CONTACT: Abdelsalam El-Farra, Dairy Import Licensing Program, Import Policies and Export Reporting Division, STOP 1021, U.S. Department of Agriculture, 1400 Independence Avenue SW., Washington, DC 20250–1021 or telephone at (202) 720–9439 or email at *abdelsalam.el-farra@fas.usda.gov.*

SUPPLEMENTARY INFORMATION: The Dairy Tariff-Rate Import Quota Licensing Regulation promulgated by the Department of Agriculture and codified at 7 CFR 6.20–6.36 provides for the issuance of licenses to import certain dairy articles that are subject to TRQs set forth in the HTS. Those dairy articles may only be entered into the United States at the in-quota TRQ tariff-rates by or for the account of a person or firm to whom such licenses have been issued and only in accordance with the terms and conditions of the regulation.

Licenses are issued on a calendar year basis, and each license authorizes the license holder to import a specified quantity and type of dairy article from a specified country of origin. The use of such licenses is monitored by the Dairy Import Licensing Program, Import Policies and Export Reporting Division, Foreign Agricultural Service, U.S. Department of Agriculture, and U.S. Customs and Border Protection, U.S. Department of Homeland Security.

The regulation at 7 CFR 6.33(a) provides that a fee will be charged for each license issued to a person or firm by the Licensing Authority in order to defray the Department of Agriculture's costs of administering the licensing system under this regulation.

The regulation at 7 CFR 6.33(a) also provides that the Licensing Authority will announce the annual fee for each license and that such fee will be set out in a notice to be published in the **Federal Register**. Accordingly, this notice sets out the fee for the licenses to be issued for the 2017 calendar year.

Notice: The total cost to the Department of Agriculture of administering the licensing system for 2017 has been estimated to be $624,300.00 and the estimated number of licenses expected to be issued is 2,500. Of the total cost, $479,200.00 represents staff and supervisory costs directly related to administering the licensing system, and $145,100.00 represents other miscellaneous costs, including travel, postage, publications, forms, and ADP system support.

Accordingly, notice is hereby given that the fee for each license issued to a person or firm for the 2017 calendar year, in accordance with 7 CFR 6.33, will be $250 per license.

Issued at Washington, DC, the 20th day of July, 2016.

Ronald Lord,

Licensing Authority.

[FR Doc. 2016–20243 Filed 8–23–16; 8:45 am]

BILLING CODE 3410–10–P

DEPARTMENT OF AGRICULTURE

Forest Service

Yavapai Resource Advisory Committee

AGENCY: Forest Service, USDA.

ACTION: Notice of meeting.

SUMMARY: The Yavapai Resource Advisory Committee (RAC) will meet in Prescott, Arizona. The committee is authorized under the Secure Rural Schools and Community Self-Determination Act (the Act) and operates in compliance with the Federal Advisory Committee Act. The purpose of the committee is to improve collaborative relationships and to provide advice and recommendations to the Forest Service concerning projects and funding consistent with Title II of the Act. RAC information can be found at the following Web site: *http://www.fs.usda.gov/main/prescott/workingtogether/advisorycommittees.*

DATES: The meeting will be held on September 27, 2016, at 11:00 a.m.

All RAC meetings are subject to cancellation. For status of meeting prior to attendance, please contact the person listed under **FOR FURTHER INFORMATION CONTACT**.

ADDRESSES: The meeting will be held at the Prescott Fire Center, 2400 Melville Drive, Prescott, Arizona.

Written comments may be submitted as described under **SUPPLEMENTARY INFORMATION**. All comments, including names and addresses when provided, are placed in the record and are available for public inspection and copying. The public may inspect comments received at the Prescott National Forest Supervisor's Office, 2971 Willow Creek Road, Bldg 4, Prescott, Arizona. Please call ahead to facilitate entry into the building.

FOR FURTHER INFORMATION CONTACT: Debbie Maneely, RAC Coordinator, by phone at 928–443–8130 or via email at *dmaneely@fs.fed.us.*

Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8:00 a.m. and 8:00 p.m., Eastern Standard Time, Monday through Friday.

SUPPLEMENTARY INFORMATION: The purpose of the meeting is to:

1. Update RAC on Outreach Efforts For Vacant Positions;
2. Review Round 6 Projects; and
3. Rank and Select Round 6 Projects.

The meeting is open to the public. The agenda will include time for people to make oral statements of three minutes or less. Individuals wishing to make an oral statement should request in writing by September 1, 2016, to be scheduled on the agenda. Anyone who would like to bring related matters to the attention of the committee may file written statements with the committee staff before or after the meeting. Written comments and requests for time to make oral comments must be sent to Debbie Maneely, RAC Coordinator, 344 South Cortez, Prescott, Arizona 86301; or by email to *dmaneely@fs.fed.us,* or via facsimile to 928–443–8208.

Meeting Accommodations: If you are a person requiring reasonable accommodation, please make requests in advance for sign language interpreting, assistive listening devices or other reasonable accommodation for access to the facility or proceedings by contacting the person listed in the section titled **FOR FURTHER INFORMATION CONTACT**. All reasonable accommodation requests are managed on a case by case basis.

Dated: August 1, 2016.

Teresa A. Chase,

Forest Supervisor.

[FR Doc. 2016–20246 Filed 8–23–16; 8:45 am]

BILLING CODE 3411–15–P

DEPARTMENT OF AGRICULTURE

Forest Service

Lyon-Mineral Resource Advisory Committee

AGENCY: Forest Service, USDA.

ACTION: Notice of meeting.

SUMMARY: The Lyon-Mineral Resource Advisory Committee (RAC) will meet in Yerington, Nevada. The committee is authorized under the Secure Rural Schools and Community Self-Determination Act (the Act) and operates in compliance with the Federal Advisory Committee Act. The purpose of the committee is to improve collaborative relationships and to provide advice and recommendations to the Forest Service concerning projects and funding consistent with Title II of the Act. RAC information can be found at the following Web site: *http://www.fs.usda.gov/main/pts/specialprojects/racweb.*

DATES: The meeting will be held October 4, 2016, at 1:00 p.m.

All RAC meetings are subject to cancellation. For status of the meeting prior to attendance, please contact the person listed under **FOR FURTHER INFORMATION CONTACT.**

ADDRESSES: The meeting will be held at the Lyon County Administration Complex, Commissioners Meeting Room, 27 South Main Street, Yerington, Nevada.

Written comments may be submitted as described under **SUPPLEMENTARY INFORMATION.** All comments, including names and addresses when provided, are placed in the record and are available for public inspection and copying. The public may inspect comments received at the Bridgeport Ranger Station, HC62, Box 1000, Bridgeport, California. Please call ahead at 760–932–7070 to facilitate entry into the building.

FOR FURTHER INFORMATION CONTACT: Jeremy Marshall, Designated Federal Officer by phone at 760–932–5801, or via email at *jmarshall02@fs.fed.us.*

Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8:00 a.m. and 8:00 p.m., Eastern Standard Time, Monday through Friday.

SUPPLEMENTARY INFORMATION: The purpose of the meeting is to:

1. Discuss new project proposals; and
2. Receive an update on current and completed projects.

The meeting is open to the public. The agenda will include time for people to make oral statements of three minutes or less. Individuals wishing to make an oral statement should request in writing by September 20, 2016, to be scheduled on the agenda. Anyone who would like to bring related matters to the attention of the committee may file written statements with the committee staff before or after the meeting. Written comments and requests for time for oral comments must be sent to Jeremy Marshall, Designated Federal Officer, Bridgeport Ranger District, HC 62, Box 1000, Bridgeport, California 93517; or by email to *jmarshall02@fs.fed.us,* or via facsimile to 760–932–5899.

Meeting Accommodations: If you are a person requiring reasonable accommodation, please make requests in advance for sign language interpreting, assistive listening devices, or other reasonable accommodation. For access to the facility or proceedings, please contact the person listed in the section titled **FOR FURTHER INFORMATION CONTACT**. All reasonable accommodation requests are managed on a case by case basis.

Dated: August 11, 2016.

Jeremy Marshall,

Bridgeport District Ranger, HTNF.

[FR Doc. 2016–20185 Filed 8–23–16; 8:45 am]

BILLING CODE 3411–15–P

DEPARTMENT OF AGRICULTURE

Grain Inspection, Packers and Stockyards Administration

Opportunity for Designation in Louisiana Area; Request for Comments on the Official Agency Servicing This Area

AGENCY: Grain Inspection, Packers and Stockyards Administration, USDA.

ACTION: Notice.

SUMMARY: The designation of the official agency listed below will end on September 30, 2016. We are asking persons or governmental agencies interested in providing official services in the areas presently served by this agency to submit an application for designation. In addition, we are asking for comments on the quality of services provided by the following designated agency: Louisiana Department of Agriculture and Forestry (Louisiana).

DATES: Applications and comments must be received by September 23, 2016.

ADDRESSES: Submit applications and comments concerning this Notice using any of the following methods:

- *Applying for Designation on the Internet:* Use FGISonline (*https://fgis.gipsa.usda.gov/default_home_FGIS.aspx*) and then click on the Delegations/Designations and Export Registrations (DDR) link. You will need to obtain an FGISonline customer number and USDA eAuthentication username and password prior to applying.
- *Submit Comments Using the Internet:* Go to *Regulations.gov* (*http://www.regulations.gov*). Instructions for submitting and reading comments are detailed on the site.
- *Mail, Courier or Hand Delivery:* Jorge Vazquez, Compliance Officer, USDA, GIPSA, FGIS, QACD, 10383 North Ambassador Drive, Kansas City, MO 64153.
- *Fax:* Mark Wooden, 816–872–1257.
- *Email: FGIS.QACD@usda.gov.*

Read Applications and Comments: All applications and comments will be available for public inspection at the office above during regular business hours (7 CFR 1.27(c)).

FOR FURTHER INFORMATION CONTACT: Jorge Vazquez, 816–866–2224 or *FGIS.QACD@usda.gov.*

SUPPLEMENTARY INFORMATION: Section 79(f) of the United States Grain Standards Act (USGSA) authorizes the Secretary to designate a qualified applicant to provide official services in a specified area after determining that the applicant is better able than any other applicant to provide such official services (7 U.S.C. 79(f)). Under section 79(g) of the USGSA, designations of official agencies are effective for no longer than five years, unless terminated by the Secretary, and may be renewed according to the criteria and procedures prescribed in section 79(f) of the USGSA.

Areas Open for Designation

Louisiana

Pursuant to Section 79(f)(2) of the United States Grain Standards Act, the following geographic area in the State of Louisiana is assigned to this official agency.

In Louisiana

The entire State, except those export port locations within the State, which are serviced by GIPSA.

Opportunity for Designation

Interested persons or governmental agencies may apply for designation to provide official services in the geographic areas specified above under the provisions of section 79(f) of the USGSA and 7 CFR 800.196. Designation in the specified geographic areas in Louisiana is for the period beginning October 1, 2016, to September 30, 2021. To apply for designation or to request more information, contact Jorge Vazquez at the address listed above.

Request for Comments

We are publishing this Notice to provide interested persons the opportunity to comment on the quality of services provided by the Louisiana official agency. In the designation process, we are particularly interested in receiving comments citing reasons and pertinent data supporting or objecting to the designation of the applicant. Submit all comments to Jorge Vazquez at the above address or at *http://www.regulations.gov.*

We consider applications, comments, and other available information when determining which applicants will be designated.

Authority: 7 U.S.C. 71–87k.

Larry Mitchell,

Administrator, Grain Inspection, Packers and Stockyards Administration.

[FR Doc. 2016–20166 Filed 8–23–16; 8:45 am]

BILLING CODE 3410–KD–P

DEPARTMENT OF AGRICULTURE

Grain Inspection, Packers and Stockyards Administration

Opportunity for Designation in Amarillo, TX Area; Request for Comments on the Official Agency Servicing This Area

AGENCY: Grain Inspection, Packers and Stockyards Administration, USDA.

ACTION: Notice.

SUMMARY: The designation of the official agency listed below will end on September 30, 2016. We are asking persons or governmental agencies interested in providing official services in the areas presently served by this agency to submit an application for designation. In addition, we are asking for comments on the quality of services provided by the following designated

agency: Amarillo Grain Exchange, Inc. (Amarillo).

DATES: Applications and comments must be received by September 23, 2016.

ADDRESSES: Submit applications and comments concerning this Notice using any of the following methods:

- *Applying for Designation on the Internet:* Use FGISonline (*https://fgis.gipsa.usda.gov/default_home_FGIS.aspx*) and then click on the Delegations/Designations and Export Registrations (DDR) link. You will need to obtain an FGISonline customer number and USDA eAuthentication username and password prior to applying.
- *Submit Comments Using the Internet:* Go to *Regulations.gov* (*http://www.regulations.gov*). Instructions for submitting and reading comments are detailed on the site.
- *Mail, Courier or Hand Delivery:* Sharon Lathrop, Compliance Officer, USDA, GIPSA, FGIS, QACD, 10383 North Ambassador Drive, Kansas City, MO 64153.
- *Fax:* Sharon Lathrop, 816–872–1257.
- *Email: FGIS.QACD@usda.gov.*

Read Applications and Comments: All applications and comments will be available for public inspection at the office above during regular business hours (7 CFR 1.27(c)).

FOR FURTHER INFORMATION CONTACT: Sharon Lathrop, 816–891–0415 or *FGIS.QACD@usda.gov.*

SUPPLEMENTARY INFORMATION: Section 79(f) of the United States Grain Standards Act (USGSA) authorizes the Secretary to designate a qualified applicant to provide official services in a specified area after determining that the applicant is better able than any other applicant to provide such official services (7 U.S.C. 79(f)). Under section 79(g) of the USGSA, designations of official agencies are effective for no longer than five years, unless terminated by the Secretary, and may be renewed according to the criteria and procedures prescribed in section 79(f) of the USGSA.

Areas Open for Designation

Amarillo

Pursuant to Section 79(f)(2) of the United States Grain Standards Act, the following geographic area, in the States of Texas and Oklahoma, is assigned to this official agency.

In Texas

Armstrong (north of Prairie Dog Town Fork of the Red River), Carson, Childress, Collingsworth, Dallam, Deaf Smith (east of U.S. Route 385), Donley, Gray, Hansford, Hall (east of U.S. Route 287), Harley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Oldham, Potter, Randall (north of Prairie Dog Town Fork of the Red River, State Route 217 and FM 1062), Roberts, Sherman, and Wheeler Counties.

In Oklahoma

Beaver, Cimarron, and Texas Counties.

Opportunity for Designation

Interested persons or governmental agencies may apply for designation to provide official services in the geographic areas specified above under the provisions of section 79(f) of the USGSA and 7 CFR 800.196. Designation in the specified geographic area, in the States of Texas and Oklahoma, is for the period beginning October 1, 2016, to September 30, 2021. To apply for designation or to request more information, contact Sharon Lathrop at the address listed above.

Request for Comments

We are publishing this Notice to provide interested persons the opportunity to comment on the quality of services provided by the Amarillo official agency. In the designation process, we are particularly interested in receiving comments citing reasons and pertinent data supporting or objecting to the designation of the applicant. Submit all comments to Sharon Lathrop at the above address or at *http://www.regulations.gov.*

We consider applications, comments, and other available information when determining which applicants will be designated.

Authority: 7 U.S.C. 71–87k.

Larry Mitchell,

Administrator, Grain Inspection, Packers and Stockyards Administration.

[FR Doc. 2016–20178 Filed 8–23–16; 8:45 am]

BILLING CODE 3410–KD–P

DEPARTMENT OF AGRICULTURE

Grain Inspection, Packers and Stockyards Administration

Designation for the Fargo, ND; Urbana, IL; Sandusky, MI; Davenport, IA; Enid, OK; Keokuk, IA; Marshall, MI; and Omaha, NE Areas

AGENCY: Grain Inspection, Packers and Stockyards Administration, USDA.

ACTION: Notice.

SUMMARY: GIPSA is announcing the designations of North Dakota Grain Inspection, Inc. (North Dakota); Champaign Danville Grain Inspection Departments, Inc. (Champaign); Detroit Grain Inspection Service, Inc. (Detroit); Eastern Iowa Grain Inspection and Weighing Service, Inc. (Eastern Iowa); Enid Grain Inspection Company, Inc. (Enid); Keokuk Grain Inspection Service (Keokuk); Michigan Grain Inspection Services, Inc. (Michigan); and Omaha Grain Inspection Service, Inc. (Omaha) to provide official services under the United States Grain Standards Act (USGSA), as amended.

DATES: *Effective Dates:* January 1, 2016 and April 1, 2016 (See table below).

ADDRESSES: Sharon Lathrop, Compliance Officer, USDA, GIPSA, FGIS, QACD, 10383 North Ambassador Drive, Kansas City, MO 64153.

FOR FURTHER INFORMATION CONTACT: Sharon Lathrop, 816–891–0415, *Sharon.L.Lathrop@usda.gov* or *FGIS.QACD@usda.gov.*

READ APPLICATIONS: All applications and comments are available for public inspection at the office above during regular business hours (7 CFR 1.27(c)).

SUPPLEMENTARY INFORMATION: In the March 29, 2016, **Federal Register** (81 FR 17428), GIPSA requested applications for designation to provide official services in the geographic areas presently serviced by North Dakota, Champaign, Detroit, Eastern Iowa, Enid, Keokuk, Michigan, and Omaha. Applications were due by April 28, 2016.

The current official agencies: North Dakota, Champaign, Detroit, Eastern Iowa, Enid, Keokuk, Michigan, and Omaha were the only applicants for designation to provide official services in these areas. As a result, GIPSA did not ask for additional comments.

GIPSA evaluated the designation criteria in section 79(f) of the USGSA (7 U.S.C. 79(f)) and determined that North Dakota, Champaign, Detroit, Eastern Iowa, Enid, Keokuk, Michigan, and Omaha are qualified to provide official services in the geographic areas specified in the **Federal Register** on March 29, 2016. This designation to provide official services in the specified area of North Dakota is effective January 1, 2016, to December 31, 2020. This designation to provide services in the specified areas of Champaign, Detroit, Eastern Iowa, Enid, Keokuk, Michigan, and Omaha is effective April 1, 2016, to March 31, 2021.

Interested persons may obtain official services by contacting these agencies at the following telephone numbers:

Official agency	Headquarters location and telephone	Designation start	Designation end
North Dakota	Fargo, ND; 701–293–7420	1/1/2016	12/31/2020
Champaign	Urbana, IL; 217–344–9306	4/1/2016	3/31/2021
Detroit	Sandusky, MI; 810–404–3786	4/1/2016	3/31/2021
Eastern Iowa	Davenport, IA; 563–322–7149	4/1/2016	3/31/2021
Enid	Enid, OK; 580–233–1121	4/1/2016	3/31/2021
Keokuk	Keokuk, IA; 319–524–6482	4/1/2016	3/31/2021
Michigan	Marshall, MI; 269–781–2711	4/1/2016	3/31/2021
Omaha	Omaha, NE; 402–341–6739	4/1/2016	3/31/2021

Section 79(f) of the USGSA authorizes the Secretary to designate a qualified applicant to provide official services in a specified area after determining that the applicant is better able than any other applicant to provide such official services (7 U.S.C. 79(f)).

Larry Mitchell,

Administrator, Grain Inspection, Packers and Stockyards Administration.

[FR Doc. 2016–20164 Filed 8–23–16; 8:45 am]

BILLING CODE 3410–KD–P

DEPARTMENT OF AGRICULTURE

Grain Inspection, Packers and Stockyards Administration

Designation for the Cedar Rapids, IA; Fremont, NE; State of Maryland; and West Lafayette, IN Areas

AGENCY: Grain Inspection, Packers and Stockyards Administration, USDA.

ACTION: Notice.

SUMMARY: GIPSA is announcing the designations of Mid-Iowa Grain Inspection, Inc. (Mid-Iowa); Fremont Grain Inspection Department, Inc. (Fremont); Maryland Department of Agriculture (Maryland); and Titus Grain Inspection, Inc. (Titus) to provide official services under the United States Grain Standards Act (USGSA), as amended.

DATES: *Effective Date:* July 1, 2016.

ADDRESSES: Sharon Lathrop, Compliance Officer, USDA, GIPSA, FGIS, QACD, 10383 North Ambassador Drive, Kansas City, MO 64153.

FOR FURTHER INFORMATION CONTACT: Sharon Lathrop, 816–891–0415, *Sharon.L.Lathrop@usda.gov* or *FGIS.QACD@usda.gov.*

Read Applications: All applications and comments are available for public inspection at the office above during regular business hours (7 CFR 1.27(c)).

SUPPLEMENTARY INFORMATION: In the March 29, 2016, **Federal Register** (81 FR 17431), GIPSA requested applications for designation to provide official services in the geographic areas presently serviced by Mid-Iowa, Fremont, Maryland, and Titus. Applications were due by April 28, 2016.

The current official agencies: Mid-Iowa, Fremont, Maryland, and Titus were the only applicants for designation to provide official services in these areas. As a result, GIPSA did not ask for additional comments.

GIPSA evaluated the designation criteria in section 79(f) of the USGSA (7 U.S.C. 79(f)) and determined that Mid-Iowa, Fremont, Maryland, and Titus are qualified to provide official services in the geographic areas specified in the **Federal Register** on March 29, 2016. This designation to provide official services in the specified area of Mid-Iowa is effective July 1, 2016, to June 30, 2020. This designation to provide official services in the areas of Fremont, Maryland, and Titus is effective July 1, 2016, to June 30, 2021.

Interested persons may obtain official services by contacting these agencies at the following telephone numbers:

Official agency	Headquarters location and telephone	Designation start	Designation end
Mid-Iowa	Cedar Rapids, IA; 319–363–0239	7/1/2016	6/30/2020
Fremont	Fremont, NE; 402–721–1270	7/1/2016	6/30/2021
Maryland	Annapolis, MD; 410–841–5769	7/1/2016	6/30/2021
Titus	West Lafayette, IN; 765–497–2202	7/1/2016	6/30/2021

Section 79(f) of the USGSA authorizes the Secretary to designate a qualified applicant to provide official services in a specified area after determining that the applicant is better able than any other applicant to provide such official services (7 U.S.C. 79 (f)).

Larry Mitchell,

Administrator, Grain Inspection, Packers and Stockyards Administration.

[FR Doc. 2016–20171 Filed 8–23–16; 8:45 am]

BILLING CODE 3410–KD–P

DEPARTMENT OF AGRICULTURE

Grain Inspection, Packers and Stockyards Administration (GIPSA)

Opportunity for Designation in Cairo, IL Area; Request for Comments on the Official Agency Servicing This Area.

AGENCY: Grain Inspection, Packers and Stockyards Administration, USDA.

ACTION: Notice.

SUMMARY: The designation of the official agency listed below will end on September 30, 2016. We are asking persons or governmental agencies interested in providing official services in the areas presently served by this agency to submit an application for designation. In addition, we are asking for comments on the quality of services provided by the following designated agency: Cairo Grain Inspection Agency, Inc. (Cairo).

DATES: Applications and comments must be received by September 23, 2016.

ADDRESSES: Submit applications and comments concerning this Notice using any of the following methods:

- *Applying for Designation on the Internet:* Use FGISonline (*https://fgis.gipsa.usda.gov/default_home_FGIS.aspx*) and then click on the Delegations/Designations and Export Registrations (DDR) link. You will need to obtain an FGISonline customer number and USDA eAuthentication username and password prior to applying.

- *Submit Comments Using the Internet:* Go to Regulations.gov (*http://www.regulations.gov*). Instructions for submitting and reading comments are detailed on the site.
- *Mail, Courier or Hand Delivery:* Mark Wooden, Compliance Officer, USDA, GIPSA, FGIS, QACD, 10383 North Ambassador Drive, Kansas City, MO 64153.
- *Fax:* Mark Wooden, 816–872–1257.
- *Email: FGIS.QACD@usda.gov.*

Read Applications and Comments: All applications and comments will be available for public inspection at the office above during regular business hours (7 CFR 1.27(c)).

FOR FURTHER INFORMATION CONTACT: Mark Wooden, 816–659–8413 or *FGIS.QACD@usda.gov.*

SUPPLEMENTARY INFORMATION: Section 79(f) of the United States Grain Standards Act (USGSA) authorizes the Secretary to designate a qualified applicant to provide official services in a specified area after determining that the applicant is better able than any other applicant to provide such official services (7 U.S.C. 79(f)). Under section 79(g) of the USGSA, designations of official agencies are effective for no longer than five years, unless terminated by the Secretary, and may be renewed according to the criteria and procedures prescribed in section 79(f) of the USGSA.

Areas Open for Designation

Cairo

Pursuant to Section 79(f)(2) of the United States Grain Standards Act, the following geographic areas, in the States of Illinois, Kentucky, and Tennessee, are assigned to this official agency.

In Illinois

Alexander, Jackson County (south of State Route 3, State Route 149, and State Route 13; west of U.S. Route 51), Johnson, Hardin, Massac, Pope, Pulaski, Randolph County (south of State Route 150 and south of State Route 3), and Union Counties.

In Kentucky

Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, Lyon, Marshall, McCracken, and Trigg Counties.

In Tennessee

Benton, Dickson, Henry, Houston, Humphreys, Lake, Montgomery, Obion, Stewart, and Weakley Counties.

The following grain elevator is not part of this geographic area assignment and is assigned to Midsouth Grain Inspection Service: Cargill, Inc., Tiptonville, Lake County, Tennessee.

Opportunity for Designation

Interested persons or governmental agencies may apply for designation to provide official services in the geographic areas specified above under the provisions of section 79(f) of the USGSA and 7 CFR 800.196. Designation in the specified geographic areas in the States of Illinois, Kentucky, and Tennessee is for the period beginning October 1, 2016, to September 30, 2021. To apply for designation or to request more information, contact Mark Wooden at the address listed above.

Request for Comments

We are publishing this Notice to provide interested persons the opportunity to comment on the quality of services provided by the Cairo official agency. In the designation process, we are particularly interested in receiving comments citing reasons and pertinent data supporting or objecting to the designation of the applicant. Submit all comments to Mark Wooden at the above address or at *http://www.regulations.gov.*

We consider applications, comments, and other available information when determining which applicants will be designated.

Authority: 7 U.S.C. 71–87k.

Larry Mitchell,

Administrator, Grain Inspection, Packers and Stockyards Administration.

[FR Doc. 2016–20170 Filed 8–23–16; 8:45 am]

BILLING CODE 3410–KD–P

DEPARTMENT OF AGRICULTURE

Grain Inspection, Packers and Stockyards Administration

Opportunity for Designation in North Carolina Area; Request for Comments on the Official Agency Servicing This Area.

AGENCY: Grain Inspection, Packers and Stockyards Administration, USDA.

ACTION: Notice.

SUMMARY: The designation of the official agency listed below will end on September 30, 2016. We are asking persons or governmental agencies interested in providing official services in the areas presently served by this agency to submit an application for designation. In addition, we are asking for comments on the quality of services provided by the following designated agency: North Carolina Department of Agriculture (North Carolina).

DATES: Applications and comments must be received by September 23, 2016.

ADDRESSES: Submit applications and comments concerning this Notice using any of the following methods:

- *Applying for Designation on the Internet:* Use FGISonline (*https://fgis.gipsa.usda.gov/default_home_FGIS.aspx*) and then click on the Delegations/Designations and Export Registrations (DDR) link. You will need to obtain an FGISonline customer number and USDA eAuthentication username and password prior to applying.
- *Submit Comments Using the Internet:* Go to Regulations.gov (*http://www.regulations.gov*). Instructions for submitting and reading comments are detailed on the site.
- *Mail, Courier or Hand Delivery:* Jacob Thein, Compliance Officer, USDA, GIPSA, FGIS, QACD, 10383 North Ambassador Drive, Kansas City, MO 64153.
- *Fax:* Jacob Thein, 816–872–1257.
- *Email: FGIS.QACD@usda.gov.*

Read Applications and Comments: All applications and comments will be available for public inspection at the office above during regular business hours (7 CFR 1.27(c)).

FOR FURTHER INFORMATION CONTACT: Jacob Thein, 816–866–2223 or *FGIS.QACD@usda.gov.*

SUPPLEMENTARY INFORMATION: Section 79(f) of the United States Grain Standards Act (USGSA) authorizes the Secretary to designate a qualified applicant to provide official services in a specified area after determining that the applicant is better able than any other applicant to provide such official services (7 U.S.C. 79(f)). Under section 79(g) of the USGSA, designations of official agencies are effective for no longer than five years, unless terminated by the Secretary, and may be renewed according to the criteria and procedures prescribed in section 79(f) of the USGSA.

Areas Open for Designation

North Carolina

Pursuant to Section 79(f)(2) of the United States Grain Standards Act, the following geographic area in the State of North Carolina is assigned to this official agency.

North Carolina

The entire State, except those export port locations within the State, which are serviced by GIPSA.

Opportunity for Designation

Interested persons or governmental agencies may apply for designation to provide official services in the geographic areas specified above under the provisions of section 79(f) of the USGSA and 7 CFR 800.196. Designation in the specified geographic areas in North Carolina is for the period beginning October 1, 2016, to September 30, 2021. To apply for designation or to request more information, contact Jacob Thein at the address listed above.

Request for Comments

We are publishing this Notice to provide interested persons the opportunity to comment on the quality of services provided by the North Carolina official agency. In the designation process, we are particularly interested in receiving comments citing reasons and pertinent data supporting or objecting to the designation of the applicant. Submit all comments to Jacob Thein at the above address or at *http://www.regulations.gov.*

We consider applications, comments, and other available information when determining which applicants will be designated.

Authority: 7 U.S.C. 71–87k.

Larry Mitchell,

Administrator, Grain Inspection, Packers and Stockyards Administration.

[FR Doc. 2016–20167 Filed 8–23–16; 8:45 am]

BILLING CODE 3410–KD–P

DEPARTMENT OF AGRICULTURE

Grain Inspection, Packers and Stockyards Administration (GIPSA)

Notice of Intent To Certify Wisconsin Department of Agriculture, Trade and Consumer Protection (Wisconsin); Request for Comments

AGENCY: Grain Inspection, Packers and Stockyards Administration, USDA.

ACTION: Notice.

SUMMARY: We are asking for comments on the quality of services provided by this Delegated State: Wisconsin Department of Agriculture, Trade and Consumer Protection (Wisconsin).

DATES: Comments must be received by September 23, 2016.

ADDRESSES: Submit comments concerning this Notice using any of the following methods:

- *Submit Comments Using the Internet:* Go to *Regulations.gov* (*http://www.regulations.gov*). Instructions for submitting and reading comments are detailed on the site.
- *Mail, Courier or Hand Delivery:* Jacob Thein, Compliance Officer, USDA, GIPSA, FGIS, QACD, 10383 North Ambassador Drive, Kansas City, MO 64153.
- *Fax:* Jacob Thein, 816–872–1257.
- *Email: Jacob.D.Thein@usda.gov* or *FGIS.QACD@usda.gov.*

Read Comments: All comments are available for public inspection at the office above during regular business hours (7 CFR 1.27(c)).

FOR FURTHER INFORMATION CONTACT: Jacob Thein, 816–866–2223, *Jacob.D.Thein@usda.gov* or *FGIS.QACD@usda.gov.*

SUPPLEMENTARY INFORMATION: Section 79(e)(2)(A) of the United States Grain Standards Act (USGSA) designates that if the Secretary determines, pursuant to paragraph (3) of Section 79(e), that a State agency is qualified to perform official inspection, meets the criteria in subsection (f)(1)(A) of Section 79, and (i) was performing official inspection at an export port location under this chapter on July 1, 1976, or (ii)(I) performed official inspection at an export port location at any time prior to July 1, 1976, (II) was designated under subsection (f) of Section 79 on December 22, 1982, to perform official inspections at locations other than export port locations, and (III) operates in a State from which total annual exports do not exceed, as determined by the Secretary, five per centum of the total amount of grain exported from the United States annually, the Secretary may delegate authority to the State agency to perform all or specified functions involving official inspection (other than appeal inspection) at export port locations within the State, including export port locations which may in the future be established, subject to such rules, regulations, instructions, and oversight as the Secretary may prescribe, and any such official inspection shall continue to be the direct responsibility of the Secretary. Any such delegation may be revoked by the Secretary, at the discretion of the Secretary, at any time upon notice to the State agency without opportunity for a hearing. Under Section 79(e) of the USGSA, every five years, the Secretary shall certify that each State agency with a delegation of authority is meeting the criteria described in subsection (f)(1)(A). Delegations shall be renewed according to the criteria and procedures set forth in Section 79(e)(2)(B) of the USGSA.

Area of Delegation

Wisconsin

Pursuant to Section 79(e)(2) of the USGSA, the following export port locations, in the State of Wisconsin is assigned to this State agency.

In Wisconsin

All export port locations in the State of Wisconsin, except those export port locations within the State, which are serviced by GIPSA (Milwaukee).

In Minnesota

The export port location of Duluth, Minnesota.

Request for Comments

We are publishing this Notice to provide interested persons the opportunity to comment on the quality of services provided by the State of Wisconsin. We are particularly interested in receiving comments citing reasons and pertinent data supporting or objecting to the delegation of the applicant. Submit all comments to Jacob Thein at the above address or at *http://www.regulations.gov.*

We consider comments and other available information when determining certification.

Authority: 7 U.S.C. 71–87k.

Larry Mitchell,

Administrator, Grain Inspection, Packers and Stockyards Administration.

[FR Doc. 2016–20173 Filed 8–23–16; 8:45 am]

BILLING CODE 3410–KD–P

DEPARTMENT OF COMMERCE

Advisory Committee on Supply Chain Competitiveness: Notice of Public Meeting

AGENCY: International Trade Administration, U.S. Department of Commerce.

ACTION: Notice of open meeting.

SUMMARY: This notice sets forth the schedule and proposed topics of discussion for a public meeting of the Advisory Committee on Supply Chain Competitiveness (Committee).

DATES: This conference call meeting will be held on Wednesday, September 7, 2016, from 4 p.m. to 5:30 p.m. Eastern Daylight Time. The deadline for members of the public to register to participate in or listen to the meeting is 5 p.m., Thursday, September 1, 2016.

ADDRESSES: The meeting will be held by conference call with webinar capabilities. The Web site, call-in number and passcode will be provided by email to registrants. Requests to register and any written comments should be submitted to: Richard Boll, Office of Supply Chain, Professional & Business Services, International Trade

Administration (Phone: (202) 482–1135 or Email: *richard.boll@trade.gov*). Members of the public are encouraged to submit registration requests and written comments via email to ensure timely receipt.

FOR FURTHER INFORMATION CONTACT: Richard Boll, Office of Supply Chain, Professional & Business Services, International Trade Administration. (Phone: (202) 482–1135 or Email: *richard.boll@trade.gov*)

SUPPLEMENTARY INFORMATION: The Committee was established under the discretionary authority of the Secretary of Commerce and in accordance with the Federal Advisory Committee Act (5 U.S.C. App. 2). It provides advice to the Secretary of Commerce on the necessary elements of a comprehensive policy approach to supply chain competitiveness designed to support U.S. export growth and national economic competitiveness, encourage innovation, facilitate the movement of goods, and improve the competitiveness of U.S. supply chains for goods and services in the domestic and global economy; and provides advice to the Secretary on regulatory policies and programs and investment priorities that affect the competitiveness of U.S. supply chains. For more information about the Committee visit: *http://trade.gov/td/services/oscpb/supplychain/acscc/*.

Matters To Be Considered: Committee members are expected to deliberate and vote on the ACSCC Freight Policy and Movement Subcommittee's recommendations in response to the Secretary's request for information on the maritime container cargo data elements that U.S. shippers, supply chains, and other seaport users and stakeholders need to be able to have and to share in advance of vessel arrival in the United States in order to:

- Improve coordination, cooperation, and information-sharing among U.S. supply chains and port stakeholders;
- improve supply chain and cargo logistics, planning, and management;
- ensure the availability of sufficient container movement equipment and workforce; and
- improve the efficiency and flow of cargo and trade throughout U.S. supply chains.

The Committee will also discuss how these elements could be used in possible technology solutions that would facilitate element sharing among cargo owners, seaports, and supply chain stakeholders.

The Office of Supply Chain, Professional & Business Services will post the draft recommendations and the final agenda on the Committee Web site at least one week prior to the meeting. Please provide any comments on the draft recommendations to Richard Boll, Office of Supply Chain, Professional & Business Services, International Trade Administration. (Phone: (202) 482–1135 or Email: *richard.boll@trade.gov*) at least six days prior to the conference call, in order to ensure adequate time to distribute the comments for Committee review. The conference call will be open to the public for comments on a first-come, first-served basis, with thirty minutes available for public comments. Access lines are limited. The minutes of the meetings will be posted on the Committee Web site within 60 days of the meeting.

Dated: August 17, 2016.

Maureen Smith,

Director, Office of Supply Chain, Professional and Business Services.

[FR Doc. 2016–20154 Filed 8–23–16; 8:45 am]

BILLING CODE 3510–DR–P

DEPARTMENT OF COMMERCE

Bureau of Industry and Security

Transportation and Related Equipment Technical Advisory Committee; Notice of Partially Closed Meeting

The Transportation and Related Equipment Technical Advisory Committee will meet on September 7, 2016, 9:30 a.m., in the Herbert C. Hoover Building, Room 3884, 14th Street between Constitution & Pennsylvania Avenues NW., Washington, DC. The Committee advises the Office of the Assistant Secretary for Export Administration with respect to technical questions that affect the level of export controls applicable to transportation and related equipment or technology.

Agenda

Public Session

1. Welcome and Introductions.
2. Status reports by working group chairs.
3. Public comments and Proposals.

Closed Session

4. Discussion of matters determined to be exempt from the provisions relating to public meetings found in 5 U.S.C. app. 2 sections 10(a)(1) and 10(a)(3).

The open session will be accessible via teleconference to 20 participants on a first come, first serve basis. To join the conference, submit inquiries to Ms. Yvette Springer at *Yvette.Springer@bis.doc.gov* no later than August 31, 2016.

A limited number of seats will be available during the public session of the meeting. Reservations are not accepted. To the extent time permits, members of the public may present oral statements to the Committee. The public may submit written statements at any time before or after the meeting. However, to facilitate distribution of public presentation materials to Committee members, the Committee suggests that presenters forward the public presentation materials prior to the meeting to Ms. Springer via email.

The Assistant Secretary for Administration, with the concurrence of the delegate of the General Counsel, formally determined on November 5, 2015, pursuant to Section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. app. 2 section (10)(d)), that the portion of the meeting dealing with pre-decisional changes to the Commerce Control List and U.S. export control policies shall be exempt from the provisions relating to public meetings found in 5 U.S.C. app. 2 sections 10(a)(1) and 10(a)(3). The remaining portions of the meeting will be open to the public.

For more information, call Yvette Springer at (202) 482–2813.

Dated: August 19, 2016.

Yvette Springer,

Committee Liaison Officer.

[FR Doc. 2016–20267 Filed 8–23–16; 8:45 am]

BILLING CODE P

DEPARTMENT OF COMMERCE

Bureau of Industry and Security

Regulations and Procedures Technical Advisory Committee; Notice of Meeting

The Regulations and Procedures Technical Advisory Committee (RPTAC) will meet September 13, 2016, 9:00 a.m., Room 3884, in the Herbert C. Hoover Building, 14th Street between Constitution and Pennsylvania Avenues NW., Washington, DC. The Committee advises the Office of the Assistant Secretary for Export Administration on implementation of the Export Administration Regulations (EAR) and provides for continuing review to update the EAR as needed.

Agenda

Public Session

1. Opening remarks by the Chairman.
2. Opening remarks by Bureau of Industry and Security.
3. Presentation of papers or comments by the Public.
4. Export Enforcement update.
5. Regulations update.

6. Working group reports.
7. Automated Export System (AES) update.

The open session will be accessible via teleconference to 20 participants on a first come, first serve basis. To join the conference, submit inquiries to Ms. Yvette Springer at *Yvette.Springer@bis.doc.gov* no later than September 6, 2016.

A limited number of seats will be available for the public session. Reservations are not accepted. To the extent that time permits, members of the public may present oral statements to the Committee. The public may submit written statements at any time before or after the meeting. However, to facilitate the distribution of public presentation materials to the Committee members, the Committee suggests that presenters forward the public presentation materials prior to the meeting to Ms. Springer via email.

For more information, call Yvette Springer at (202) 482–2813.

Dated: August 19, 2016.

Yvette Springer,

Committee Liaison Officer.

[FR Doc. 2016–20336 Filed 8–23–16; 8:45 am]

BILLING CODE 3510–JT–P

DEPARTMENT OF COMMERCE

Bureau of Industry and Security

Materials Technical Advisory Committee; Notice of Partially Closed Meeting

The Materials Technical Advisory Committee will meet on September 8, 2016, 10 a.m., Herbert C. Hoover Building, Room 3884, 14th Street between Constitution & Pennsylvania Avenues NW., Washington, DC. The Committee advises the Office of the Assistant Secretary for Export Administration with respect to technical questions that affect the level of export controls applicable to materials and related technology.

Agenda

Open Session

1. Opening remarks and Introductions.
2. Remarks from the Bureau of Industry and Security senior management.
3. Report by regime representatives.
4. Report by working groups (Composite Working Group, Biological Working Group, Pump and Valves Working Group, and the Chemicals Working Group).
5. Public Comments and New Business.

Closed Session

6. Discussion of matters determined to be exempt from the provisions relating to public meetings found in 5 U.S.C. app. 2 section 10(a)(1) and 10(a)(3).

The open session will be accessible via teleconference to 20 participants on a first come, first serve basis. To join the conference, submit inquiries to Ms. Yvette Springer at *Yvette.Springer@bis.doc.gov,* no later than September 1, 2016.

A limited number of seats will be available during the public session of the meeting. Reservations are not accepted. To the extent time permits, members of the public may present oral statements to the Committee. Written statements may be submitted at any time before or after the meeting. However, to facilitate distribution of public presentation materials to Committee members, the materials should be forwarded prior to the meeting to Ms. Springer via email.

The Assistant Secretary for Administration, with the concurrence of the delegate of the General Counsel, formally determined on November 5, 2015, pursuant to Section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. app. 2 section 10(d)), that the portion of the meeting dealing with pre-decisional changes to the Commerce Control List and the U.S. export control policies shall be exempt from the provisions relating to public meetings found in 5 U.S.C. app. 2 sections 10(a)(1) and 10(a)(3). The remaining portions of the meeting will be open to the public.

For more information, call Yvette Springer at (202) 482–2813.

Dated: August 19, 2016.

Yvette Springer,

Committee Liaison Officer.

[FR Doc. 2016–20332 Filed 8–23–16; 8:45 am]

BILLING CODE 3510–JT–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648–XE497

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to BlueCrest Alaska Operating LLC Drilling Activities at Cosmopolitan State Unit, Alaska, 2016

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; withdrawal of an Incidental Harassment Authorization (IHA) application.

SUMMARY: Notice is hereby given that BlueCrest Alaska Operating, LLC (BlueCrest) has withdrawn its application for an IHA to take marine mammals, by harassment, incidental to conducting an oil and gas production drilling program in lower Cook Inlet, AK, on State of Alaska Oil and Gas Lease 384403 under the program name of Cosmopolitan State during the 2016 open water season. Accordingly, NMFS has withdrawn its related proposed IHA.

ADDRESSES: An electronic copy of the application, proposed IHA **Federal Register** notice, NMFS' Draft Programmatic Environmental Assessment (EA) for activities in Cook Inlet, and a list of the references used in this document may be obtained online at: *http://www.nmfs.noaa.gov/pr/permits/incidental.htm.* In case of problems accessing these documents, please call the contact listed below. Documents cited in this notice may also be viewed, by appointment, during regular business hours, at the aforementioned address.

FOR FURTHER INFORMATION CONTACT: Dale Youngkin, Office of Protected Resources, NMFS, (301) 427–8401.

SUPPLEMENTARY INFORMATION: On September 28, 2015 NMFS received an IHA application from BlueCrest for the taking of marine mammals incidental to an oil and gas production drilling program in lower Cook Inlet, AK, during the 2016 open water season. NMFS determined that the application was adequate and complete on April 12, 2016. The requested IHA would authorize take, by Level B harassment only, of nine marine mammal species as a result from the specified activity. NMFS published a notice of the proposed IHA in the **Federal Register** (81 FR 35548) on June 2, 2016. On July 21, 2016, NMFS accepted notice from BlueCrest withdrawing their IHA application for the proposed action due to their decision to forego operations in Cook Inlet at this time due to economic reasons. Therefore, NMFS has withdrawn its proposed IHA for the action.

Dated: August 19, 2016.

Donna S. Wieting,

Director, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 2016–20251 Filed 8–23–16; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Proposed Information Collection; Comment Request; Green Sturgeon ESA 4(d) Rule Take Exceptions and Exemptions

AGENCY: National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice.

SUMMARY: The Department of Commerce, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995.

DATES: Written comments must be submitted on or before October 24, 2016.

ADDRESSES: Direct all written comments to Jennifer Jessup, Departmental Paperwork Clearance Officer, Department of Commerce, Room 6616, 14th and Constitution Avenue NW., Washington, DC 20230 (or via the Internet at *JJessup@doc.gov*).

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of the information collection instrument and instructions should be directed to Melissa Neuman, NMFS West Coast Region Protected Resources Division, 501 West Ocean Boulevard, Suite 4200, Long Beach, CA 90802, (562) 980–4115, or *Melissa.Neuman@noaa.gov.*

SUPPLEMENTARY INFORMATION:

I. Abstract

This request is for an extension, without change, of a currently approved information collection.

The Southern Distinct Population Segment of North American green sturgeon (Acipenser medirostris; hereafter, "Southern DPS") was listed as a threatened species in April 2006. Protective regulations under section 4(d) of the ESA were promulgated for the species on June 2, 2010 (75 FR 30714) (the final ESA 4(d) Rule). To comply with the ESA and the protective regulations, entities must obtain take authorization prior to engaging in activities involving take of Southern DPS fish unless the activity is covered by an exception or exemption. Certain activities described in the "exceptions" provision of 50 CFR 223.210(b) are not subject to the take prohibitions if they adhere to specific criteria and reporting requirements. Under the "exemption" provision of 50 CFR 223.210(c), the take prohibitions do not apply to scientific research, scientific monitoring, and fisheries activities conducted under an approved 4(d) program or plan; similarly, take prohibitions do not apply to tribal resource management activities conducted under a Tribal Plan for which the requisite determinations described in 50 CFR 223.102(c)(3) have been made.

To ensure that activities qualify under exceptions to or exemptions from the take prohibitions, local, state, and federal agencies, non-governmental organizations, academic researchers, and private organizations are asked to voluntarily submit detailed information regarding their activity on a schedule to be determined by National Marine Fisheries Service (NMFS) staff. This information is used by NMFS to (1) track the number of Southern DPS fish taken as a result of each action; (2) understand and evaluate the cumulative effects of each action on the Southern DPS; and (3) determine whether additional protections are needed for the species, or whether additional exceptions may be warranted. NMFS designed the criteria to ensure that plans meeting the criteria would adequately limit impacts on threatened Southern DPS fish, such that additional protections in the form of a federal take prohibition would not be necessary and advisable.

II. Method of Collection

Respondents have a choice of either electronic or paper forms. Methods of submittal include email of electronic forms, and mail and facsimile transmission of paper forms.

III. Data

OMB Control Number: 0648–0613.

Form Number(s): None.

Type of Review: Regular submission (extension of a currently approved collection).

Affected Public: Not-for-profit institutions; State, Local, or Tribal government; business or other for-profit organizations.

Estimated Number of Respondents: 58.

Estimated Time per Response: Written notification describing research, monitoring or habitat restoration activities, 40 hours; development of fisheries management and evaluation plans or state 4(d) research programs, 40 hours; reports, 5 hours; development of a tribal fishery management plan, 20 hours.

Estimated Total Annual Burden Hours: 1,760.

Estimated Total Annual Cost to Public: $200.

IV. Request for Comments

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden (including hours and cost) of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

Dated: August 19, 2016.

Sarah Brabson,

NOAA PRA Clearance Officer.

[FR Doc. 2016–20252 Filed 8–23–16; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Telecommunications and Information Administration

[Docket No. 160706588–6588–01]

RIN 0660–XC027

State Alternative Plan Program (SAPP) and the First Responder Network Authority Nationwide Public Safety Broadband Network

AGENCY: National Telecommunications and Information Administration, U.S. Department of Commerce.

ACTION: Notice; reopening of comment period.

SUMMARY: On July 19, 2016, the National Telecommunications and Information Administration (NTIA) issued a notice and request for public comments on NTIA's preliminary guidance concerning how a qualified state may apply to NTIA for required authority to enter into a spectrum capacity lease with the First Responder Network Authority (FirstNet) and optional grant funds to assist in the construction of its radio access network (RAN) should it opt to do so as allowed under the Middle Class Tax Relief and Job

Creation Act of 2012 (Act). In response to requests for additional time in which to comment, NTIA through this notice reopens the comment period. Comments received between the August 18, 2016 due date for comments announced in the July 19, 2016 notice, and publication of this notice in the **Federal Register**, are deemed to be timely.

DATES: Comments are due no later than 5:00 p.m. Eastern Daylight Time on September 7, 2016.

ADDRESSES: The public may submit written comments on issues addressed in this Notice. Written comments may be submitted electronically via email to: *sapp-comments@ntia.doc.gov* or by mail to: Office of Public Safety Communications, National Telecommunications and Information Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW., Room 4078, Washington, DC 20230. Comments submitted by email should be machine-readable and should not be copy-protected. Commenters should include the name of the person or organization filing the comment, as well as a page number on each page of their submissions. Paper submissions should also include a CD or DVD with an electronic version of the document, which should be labeled with the name and organization of the filer. All comments received are a part of the public record and will generally be posted to the NTIA Web site (*http://www.ntia.doc.gov*) without change. All personal identifying information (*e.g.*, name, address) voluntarily submitted by the commenter may be publicly accessible.

FOR FURTHER INFORMATION CONTACT: Carolyn Dunn, Office of Public Safety Communications, National Telecommunications and Information Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW., Room 4078, Washington, DC 20230; *sapp-comments@ntia.doc.gov;* (202) 482–4103. Please direct media inquiries to NTIA's Office of Public Affairs: (202) 482–7002; via email to: *press@ntia.doc.gov.*

SUPPLEMENTARY INFORMATION: The original notice provided NTIA's preliminary guidance concerning how a qualified state may apply to NTIA for authority to enter into a spectrum capacity lease with FirstNet and receive a grant to construct its RAN should it opt to do so as allowed under the Act. *See* Notice and request for comments, *State Alternative Plan Program (SAPP) and the First Responder Network Authority Nationwide Public Safety Broadband Network,* 81 FR 46907 (July 19, 2016), *available at: https://www.ntia.doc.gov/files/ntia/publications/fr-sapp-firstnet-rfc-07182016.pdf.* The original deadline for submission of comments was August 18, 2016. In response to requests for additional time in which to comment, NTIA reopens the comment period with this notice. Comments received between the August 18, 2016 due date for comments announced in the July 19, 2016 notice, and publication of this notice in the **Federal Register**, are deemed to be timely.

Dated: August 18, 2016.

Kathy D. Smith,

Chief Counsel, National Telecommunications and Information Administration.

[FR Doc. 2016–20169 Filed 8–23–16; 8:45 am]

BILLING CODE 3510–60–P

COMMODITY FUTURES TRADING COMMISSION

Agency Information Collection Activities Under OMB Review

AGENCY: Commodity Futures Trading Commission.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act of 1995 (PRA), this notice announces that the Information Collection Request (ICR) abstracted below has been forwarded to the Office of Management and Budget (OMB) for review and comment. The ICR describes the nature of the information collection and its expected costs and burden.

DATES: Comments must be submitted on or before September 23, 2016.

ADDRESSES: Comments regarding the burden estimated or any other aspect of the information collection, including suggestions for reducing the burden, may be submitted directly to the Office of Information and Regulatory Affairs (OIRA) in OMB, within 30 days of the notice's publication, by email at *OIRAsubmissions@omb.eop.gov.* Please identify the comments by OMB Control No. 3038–0099. Please provide the Commodity Futures Trading Commission ("CFTC" or "Commission") with a copy of all submitted comments at the address listed below. Please refer to OMB Reference No. 3038–0099, found on *http://reginfo.gov.* Comments may also be mailed to the Office of Information and Regulatory Affairs, Office of Management and Budget, Attention: Desk Officer for the Commodity Futures Trading Commission, 725 17th Street NW., Washington, DC 20503, and to: Roger Smith, Special Counsel, Division of Market Oversight, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street NW., Washington, DC 20581; or through the CFTC Web site at *http://comments.cftc.gov.* Follow the instructions for submitting comments through the Web site.

Comments may also be mailed to: Christopher J. Kirkpatrick, Secretary of the Commission, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street NW., Washington, DC 20581 or by Hand Deliver/Courier at the same address.

A copy of the supporting statements for the collection of information discussed above may be obtained by visiting *RegInfo.gov.* All comments must be submitted in English, or if not, accompanied by an English translation. Comments will be posted as received to *www.cftc.gov.*

FOR FURTHER INFORMATION CONTACT: Roger Smith, Special Counsel, Division of Market Oversight, Commodity Futures Trading Commission, (202) 418–5344; email: *rsmith@cftc.gov,* and refer to OMB Control No. 3038–0099. A copy may also be obtained from this contact.

SUPPLEMENTARY INFORMATION:

Title: Process for a Swap Execution Facility or Designated Contract Market to Make a Swap Available to Trade (OMB Control No. 3038–0099). This is a request for extension of a currently approved information collection.

Abstract: The collection of information is needed to help determine which swaps should be subject to the trade execution requirement under Section 2(h)(8) of the Commodity Exchange Act pursuant to Section 723 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. A swap execution facility ("SEF") or designated contract market ("DCM") that submits a determination that a swap is available to trade must address at least one of several factors to demonstrate that the swap is suitable for trading pursuant to the trade execution requirement. The Commission uses the collection of information to facilitate the application of the trade execution requirement and the requirements associated with methods of execution under parts 37 and 38 of the Commission's regulations.

The Commission did not receive any relevant comments on the 60-day **Federal Register** notice, 81 FR 38689, dated June 14, 2016.

Burden Statement: The Commission estimates the burden of reviewing the prescribed factors and data to make a determination for this collection to be 16 hours per response. The total cost burden per rule submission filing is estimated to be $958.16. The Commission based its calculation on (1) an hourly wage rate of $48.14 for a Compliance Specialist to perform the filing over 8 hours;[1] an hourly wage rate of $71.63 for one economist to analyze trading data in the process over 8 hours.[2]

Respondents/Affected Entities: SEFs, DCMs.

Estimated Number of Respondents: 5.

Estimated Total Annual Burden on Respondents: 80 hours.

Frequency of Collection: Occasional.

Authority: 44 U.S.C. 3501 *et seq.*

Dated: August 19, 2016.

Christopher J. Kirkpatrick,

Secretary of the Commission.

[FR Doc. 2016–20288 Filed 8–23–16; 8:45 am]

BILLING CODE 6351–01–P

DEPARTMENT OF DEFENSE

Office of the Secretary

Defense Advisory Committee on Women in the Services; Notice of Federal Advisory Committee Meeting

AGENCY: Department of Defense.

ACTION: Federal Advisory Committee meeting notice.

SUMMARY: The Department of Defense is publishing this notice to announce that the following Federal Advisory Committee meeting of the Defense Advisory Committee on Women in the Services (DACOWITS) will take place. This meeting is open to the public.

DATES: Tuesday, September 13, 2016, from 8:30 a.m. to 2:15 p.m.; Wednesday, September 14, 2016, from 8:30 a.m. to 12 p.m.

ADDRESSES: Hilton Alexandria—Mark Center, 5000 Seminary Road, Alexandria, VA 22311.

FOR FURTHER INFORMATION CONTACT: Mr. Robert Bowling or DACOWITS Staff at 4800 Mark Center Drive, Suite 04J25–01, Alexandria, Virginia 22350–9000; *robert.d.bowling1.civ@mail.mil,* telephone (703) 697–2122, fax (703) 614–6233. Any updates to the agenda or any additional information can be found at *http://dacowits.defense.gov/.*

SUPPLEMENTARY INFORMATION: Pursuant to the Federal Advisory Committee Act of 1972 (5 U.S.C. Appendix, as amended), the Government in the Sunshine Act of 1976 (5 U.S.C. 552b), and section 10(a), Public Law 92–463, as amended, notice is hereby given of a forthcoming meeting of the DACOWITS.

The purpose of the meeting is for the Committee to receive briefings and updates relating to their current work. The Committee will start the meeting with the Designated Federal Officer (DFO) giving a status update on the Committee's requests for information. There will then be a panel discussion with the U.S. Army and U.S. Marine Corps to discuss the Curriculum Standards for Infantry Officer School. This will be followed by a panel discussion with the Military Services on their Gender Neutral Occupational Standards. This will be followed with a public comment period. Day one will end with a panel discussion with the Military Services on their Maternity Uniforms. On the second day the Committee will receive a briefing from the Joint Advertising Market Research & Studies (JAMRS) Office on the Nation's Recruitable Population, which will then be followed by a panel discussion with the Military Services on the same topic. Lastly, the Committee will propose and vote on their 2016 Recommendations to the Secretary of Defense.

Pursuant to 41 CFR 102–3.140, and section 10(a)(3) of the Federal Advisory Committee Act of 1972, interested persons may submit a written statement for consideration by the DACOWITS. Individuals submitting a written statement must submit their statement to the point of contact listed at the address in **FOR FURTHER INFORMATION CONTACT** no later than 5 p.m., Tuesday, September 6, 2016. If a written statement is not received by Tuesday, September 6, 2016, prior to the meeting, which is the subject of this notice, then it may not be provided to or considered by the DACOWITS until its next open meeting. The DFO will review all timely submissions with the DACOWITS Chair and ensure they are provided to the members of the Committee. If members of the public are interested in making an oral statement, a written statement should be submitted. After reviewing the written comments, the Chair and the DFO will determine who of the requesting persons will be able to make an oral presentation of their issue during an open portion of this meeting or at a future meeting. Pursuant to 41 CFR 102–3.140(d), determination of who will be making an oral presentation is at the sole discretion of the Committee Chair and the DFO, and will depend on time available and if the topics are relevant to the Committee's activities. Five minutes will be allotted to persons desiring to make an oral presentation. Oral presentations by members of the public will be permitted only on Tuesday, September 13, 2016 from 12 p.m. to 12:30 p.m. in front of the full Committee. The number of oral presentations to be made will depend on the number of requests received from members of the public.

Pursuant to 5 U.S.C. 552b and 41 CFR 102–3.140 through 102–3.165, this meeting is open to the public, subject to the availability of space.

Meeting Agenda

Tuesday, September 13, 2016, From 8:30 a.m. to 2:15 p.m.

—Welcome, Introductions, Announcements

— Request for Information Status Update

— Panel Discussion—Curriculum Standards for Infantry Officer School

—Panel Discussion—Gender Neutral Occupational Standards

—Public Comment Period

—Panel Discussion—Maternity Uniforms

Wednesday, September 14, 2016, From 8:30 a.m. to 12:00 p.m.

—Welcome and Announcements

—Briefing—The Nation's Recruitable Population

—Panel Discussion—The Nation's Recruitable Population

—Committee Proposes and Votes on 2016 Recommendations

Dated: August 19, 2016.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2016–20306 Filed 8–23–16; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF DEFENSE

Department of the Navy

Notice of Intent To Prepare a Supplemental Environmental Impact Statement (EIS) to the Land Acquisition and Airspace Establishment Final EIS at the Marine Corps Air Ground Combat Center, Twentynine Palms, California

AGENCY: Department of the Navy, DoD.

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[1] *See* Report on Management & Professional Earnings in the Securities Industry 2013, Securities Industry and Financial Markets Association at 4 (Oct. 2013). The report lists the average total annual compensation for a compliance specialist (intermediate) as $66,649. The Commission estimated the personnel's hourly cost by assuming an 1,800 hour work year and by multiplying by 1.3 to account for overhead and other benefits.

[2] *See* Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Economists, *http://www.bls.gov/ooh/life-physical-and-social-science/economists.htm.* The report lists the median total annual compensation for an economist as $99,180. The Commission estimated the economist personnel's hourly cost by assuming an 1,800 hour work year and by multiplying by 1.3 to account for overhead and other benefits.

ACTION: Notice.

SUMMARY: Pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) of 1969, as implemented by the Council on Environmental Quality Regulations (40 CFR parts 1500–1508), the Department of the Navy (DON) announces its intent to prepare a Supplemental Environmental Impact Statement (EIS) to evaluate the potential environmental impacts that may result from implementing alternative desert tortoise translocation plans at the Marine Corps Air Ground Combat Center, Twentynine Palms (hereinafter "the Combat Center"). The Supplemental EIS is a supplement to the Final EIS for "Land Acquisition and Airspace Establishment to Support Large-Scale Marine Air Ground Task Force Live Fire and Maneuver Training" dated July 2012 (hereinafter "2012 Final EIS") (77 FR 44234).

SUPPLEMENTARY INFORMATION: Pursuant to 40 CFR 1502.9(c), a Supplemental EIS is being prepared to evaluate new information relevant to environmental concerns associated with translocation of tortoises from specific training areas on newly acquired lands. Translocation was deemed necessary to mitigate the moderate to high levels of impact on the tortoise population from the Marine Expeditionary Brigade training activities assessed in the 2012 Final EIS. Since the 2012 Final EIS, the Marine Corps has conducted additional detailed studies and worked cooperatively with the United States Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife, and the Bureau of Land Management (BLM) on alternative translocation plans for the desert tortoise, as required in a 2012 Biological Opinion (BO) issued by the USFWS. In light of new information gained from these efforts, the DON has elected to prepare a Supplemental EIS focusing on the evaluation of potential impacts from alternative tortoise translocation plans.

The purpose of the proposed action evaluated in the Supplemental EIS is to study alternative translocation plans in support of the project that was described in the 2012 Final EIS, selected in the 2013 Record of Decision (ROD) (78 FR 11632), and authorized by the National Defense Authorization Act for Fiscal Year 2014.

The Marine Corps needs to implement the proposed action to satisfy requirements identified in the 2012 Final EIS and associated 2012 BO. The 2012 BO concluded that the implementation of the Preferred Alternative from the 2012 Final EIS would likely result in the "take" of desert tortoises associated with military training, tortoise translocation efforts, and authorized and unauthorized Off-Highway Vehicle (OHV) use by recreationists displaced from former areas of the Johnson Valley OHV Area.

The 2013 ROD and associated BO committed the Marine Corps to undertake measures to minimize the "take" of desert tortoises including:

- Establishment of new Special Use Areas (tortoises habitat areas where military training and Off-Highway Vehicle use will be prohibited;
- Translocation Program;
- Desert Tortoise Headstarting and Population Augmentation; and
- Monitoring.

While the 2012 Final EIS and associated BO analyzed a particular translocation program, additional detailed studies and cooperative work on alternative translocation plans for the desert tortoise revealed other possible methods of meeting these requirements. In light of the purpose and need for the proposed action, the DON has identified two potential action alternatives and a No-Action Alternative for the translocation of desert tortoise from training impact areas.

Each alternative will identify recipient sites (to which tortoises would be translocated), and control sites (where the resident tortoise populations will be studied to provide comparative data on survival, threats to survival, habitat stability and changes, and health and disease relative to the translocated tortoise populations at the recipient sites). Each alternative will also include details of the proposed tortoise translocation, including specific handling procedures, fencing, clearance surveys, 30 years of post-translocation monitoring, and other research activities.

The Combat Center identified and applied screening criteria from the 2011 USFWS revised recovery plan for the Mojave population of the desert tortoise and the 2011 USFWS guidance for translocation of desert tortoises to evaluate and select the proposed recipient sites/areas under each alternative. These criteria relate to land use, habitat quality, population levels, disease prevalence, and distance from collection. The Combat Center also screened for research and monitoring feasibility.

Under the No-Action Alternative, the Marine Corps would conduct translocation of desert tortoises in accordance with the General Translocation Plan (GTP) described in the 2012 BO. Alternatives 1 and 2 primarily differ from the No Action Alternative in the selection of proposed recipient and control areas and in the distribution of desert tortoises at each release site. Compared to the No Action Alternative, Alternatives 1 and 2 would also include additional research studies and reflect updated information obtained from the 3-year program of surveys conducted since the 2012 Final EIS. Alternative 2 differs from Alternative 1 in that: (1) One less recipient site would be used; (2) the pairing of control sites to recipient sites would be different; (3) the Bullion control site would be located on the Combat Center instead of within the Cleghorn Lakes Wilderness Area; and (4) translocation densities would be different.

The Supplemental EIS will analyze environmental effects associated primarily with biological resources, land use, air quality, and cultural resources. The Supplemental EIS analysis will evaluate direct, indirect, short-term and long-term impacts, as well as cumulative impacts from other relevant activities. Additionally, the DON will undertake any consultations required by all applicable laws or regulations.

BLM has been invited to be a Cooperating Agency on the preparation of the Supplemental EIS since many of the lands to which tortoises would be relocated are managed by BLM.

Pursuant to 40 CFR 1502.9(c)(4), the DON will prepare, circulate, and file the Supplemental EIS in the same fashion (exclusive of scoping) as it did the draft and 2012 Final EIS. This will include providing a Draft Supplemental EIS for a 45-day public review period in October 2016, during which three (3) public information meetings will be held in the communities of Joshua Tree, Palm Springs, and Barstow. A Notice of Availability of the Draft Supplemental EIS and Notice of Public Meetings will be published in the **Federal Register**, in area newspapers, and on the Supplemental EIS Web site at *http://LADTT.com* in advance of the release of the Draft Supplemental EIS and the public meetings. Those notices will identify further details about the public meetings and the specific opportunities and methods for the public to provide comments on the Draft Supplemental EIS.

The mailing list for the Supplemental EIS is based on the 2012 Final EIS. Those on this list will receive notices and documents related to Supplemental EIS preparation. This list includes local, state, and federal agencies with jurisdiction or other interests in the alternatives. In addition, the mailing list includes adjacent property owners, affected municipalities, and other interested parties such as conservation and off-highway vehicle organizations. Anyone wishing to be added to the mailing list may request to be added by contacting the Supplemental EIS project manager at the address below.

No decision will be made to implement any alternative until the Supplemental EIS process is completed and a ROD is signed by the Assistant Secretary of the Navy (Energy, Installations and Environment) or designee.

FOR FURTHER INFORMATION CONTACT: NEPA Program Manager (Attn: Mr. Scott Kerr), Bldg. 1418, MAGTFTC/MCAGCC, Twentynine Palms, CA 92278–8104; phone: 760–830–8190; email: *Scott.Kerr@usmc.mil.*

Dated: August 18, 2016.

C. Pan,

Lieutenant, Judge Advocate General's Corps, U.S. Navy, Alternate Federal Register Liaison Officer.

[FR Doc. 2016–20231 Filed 8–23–16; 8:45 am]

BILLING CODE 3810–FF–P

DEPARTMENT OF EDUCATION

[Docket No.: ED–2016–ICCD–0093]

Agency Information Collection Activities; Comment Request; 2012/17 Beginning Postsecondary Students Longitudinal Study: (BPS:12/17)

AGENCY: National Center for Education Statistics (NCES), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing a revision of an existing information collection.

DATES: Interested persons are invited to submit comments on or before October 24, 2016.

ADDRESSES: To access and review all the documents related to the information collection listed in this notice, please use *http://www.regulations.gov* by searching the Docket ID number ED–2016–ICCD–0093. Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at *http://www.regulations.gov* by selecting the Docket ID number or via postal mail, commercial delivery, or hand delivery. *Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted.* Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Room 2E–349, Washington, DC 20202–4537.

FOR FURTHER INFORMATION CONTACT: For specific questions related to collection activities, please contact NCES Information Collections at *NCES.Information.Collections@ed.gov.*

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: 2012/17 Beginning Postsecondary Students Longitudinal Study: (BPS:12/17).

OMB Control Number: 1850–0631.

Type of Review: A revision of an existing information collection.

Respondents/Affected Public: Individuals.

Total Estimated Number of Annual Responses: 39,399.

Total Estimated Number of Annual Burden Hours: 55,002.

Abstract: The 2012/17 Beginning Postsecondary Students Longitudinal Study (BPS:12/17) is conducted by the National Center for Education Statistics (NCES), within the U.S. Department of Education (ED). BPS is designed to follow a cohort of students who enroll in postsecondary education for the first time during the same academic year, irrespective of the date of high school completion. The study collects data on students' persistence in and completion of postsecondary education programs; their transition to employment; demographic characteristics; and changes over time in their goals, marital status, income, and debt, among other indicators. Data from BPS are used to help researchers and policymakers better understand how financial aid influences persistence and completion, what percentages of students complete various degree programs, what are the early employment and wage outcomes for certificate and degree attainers, and why students leave school. This request is to conduct the BPS:12/17 full-scale data collection, including a student interview, file matching to various administrative data sources, and collection of corresponding postsecondary education transcripts and student records.

Dated: August 19, 2016.

Tomakie Washington,

Acting Director, Information Collection Clearance Division, Office of the Chief Privacy Officer, Office of Management.

[FR Doc. 2016–20263 Filed 8–23–16; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

Reopening the Fiscal Year 2016 Competition for Certain Eligible Applicants; Investing in Innovation Fund—Development Grants Full Application

[Catalog of Federal Domestic Assistance (CFDA) Number: 84.411C]

AGENCY: Office of Innovation and Improvement, Department of Education.

ACTION: Notice.

SUMMARY: On April 25, 2016, we published in the **Federal Register** (81 FR 24070) a notice inviting applications for new awards for fiscal year (FY) 2016 for the Investing in Innovation (i3) Fund Development competition. The Department reopens the FY 2016 i3 Development Grants competition for, and will accept applications from, certain prospective eligible applicants affected by the severe storms and flooding beginning on August 11, 2016, and continuing, in Louisiana. We are reopening this competition in order to help affected eligible applicants compete fairly with other eligible applicants under this competition.

DATES:

Deadline for Transmittal of Applications for Eligible Applicants: August 30, 2016.

Deadline for Intergovernmental Review: October 24, 2016.

SUPPLEMENTARY INFORMATION: On April 25, 2016, we published in the **Federal Register** (81 FR 24070) a notice inviting applications for new awards for FY 2016 for the i3 Development competition. The deadline for transmittal of full applications was August 16, 2016. We are reopening this competition in order to allow certain eligible applicants affected by the severe storms and flooding in Louisiana (described in more detail below) more time to prepare and submit their applications.

Eligibility: Applicants are eligible to submit applications under this reopened competition if they are located in a Federally declared disaster area, as determined by the Federal Emergency Management Agency (FEMA) (see *www.fema.gov/news/disasters.fema*), and adversely affected by the severe storms and flooding beginning on August 11, 2016, and continuing, in Louisiana.

Under section 14007(a)(1) of the American Recovery and Reinvestment Act of 2009 (ARRA) (Pub. L. 111–5), an eligible applicant for the Investing in Innovation Fund is (a) a local educational agency (LEA) or (b) a partnership between a nonprofit organization and (1) one or more LEAs or (2) a consortium of schools. An eligible applicant that is a partnership may apply under this reopened competition if any of the entities required to be part of the partnership (*i.e.,* a nonprofit organization, an LEA, or a consortium of schools) are located in a Federally declared disaster area, as determined by FEMA, and adversely affected by the severe storms and flooding in Louisiana.

An eligible applicant must provide a certification in its application that it meets the criteria for submitting an application as part of the reopened competition and be prepared to provide appropriate supporting documentation, if requested. If such an eligible applicant is submitting its application electronically, the submission of the application serves as the eligible applicant's attestation that it meets the criteria for submitting an application as part of this reopened competition.

We are not reopening the application period for any other applicants. Thus, applications from applicants not affected by the severe storms and flooding that were not timely submitted may not be submitted as part of this reopened competition.

Note: All information in the NIA for this competition remains the same, except for the deadline date for certain eligible applicants and the deadline for intergovernmental review.

Program Authority: ARRA, Division A, Section 14007, Pub. L. 111–5.

FOR FURTHER INFORMATION CONTACT: Kelly Terpak, U.S. Department of Education, 400 Maryland Avenue SW., Room 4W312, Washington, DC 20202. Telephone: (202) 245–7122. Email address: *i3@ed.gov.*

If you use a telecommunications device for the deaf or a text telephone, call the Federal Relay Service (FRS), toll free, at 1–800–877–8339.

Accessible Format: Individuals with disabilities can obtain this document and a copy of the application package in an accessible format (*e.g.,* braille, large print, audiotape, or compact disc) on request to the program contact person listed under **FOR FURTHER INFORMATION CONTACT** in this notice.

Electronic Access to This Document: The official version of this document is the document published in the **Federal Register**. Free Internet access to the official edition of the **Federal Register** and the Code of Federal Regulations is available via the Federal Digital System at: *www.gpo.gov/fdsys.* At this site you can view this document, as well as all other documents of this Department published in the **Federal Register**, in text or Portable Document Format (PDF). To use PDF you must have Adobe Acrobat Reader, which is available free at the site.

You may also access documents of the Department published in the **Federal Register** by using the article search feature at: *www.federalregister.gov.* Specifically, through the advanced search feature at this site, you can limit your search to documents published by the Department.

Dated: August 19, 2016.

Nadya Chinoy Dabby,

Assistant Deputy Secretary for Innovation and Improvement.

[FR Doc. 2016–20268 Filed 8–23–16; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

[Docket No.: ED–2016–ICCD–0054]

Agency Information Collection Activities; Submission to the Office of Management and Budget for Review and Approval; Comment Request; Evaluation of the ESSA Title I, Part D, Neglected or Delinquent Programs

AGENCY: Department of Education (ED), Office of Planning, Evaluation and Policy Development (OPEPD).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing a new information collection.

DATES: Interested persons are invited to submit comments on or before September 23, 2016.

ADDRESSES: To access and review all the documents related to the information collection listed in this notice, please use *http://www.regulations.gov* by searching the Docket ID number ED–2016–ICCD–0054. Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at *http://www.regulations.gov* by selecting the Docket ID number or via postal mail, commercial delivery, or hand delivery. *Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted.* Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Room 2E–347, Washington, DC 20202–4537.

FOR FURTHER INFORMATION CONTACT: For specific questions related to collection activities, please contact Michael Fong, 202–401–7462.

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: Evaluation of the ESSA Title I, Part D, Neglected or Delinquent Programs.

OMB Control Number: 1875–NEW.

Type of Review: A new information collection.

Respondents/Affected Public: State, Local, and Tribal Governments.

Total Estimated Number of Annual Responses: 554.

Total Estimated Number of Annual Burden Hours: 529.

Abstract: The purpose of this study is to examine how state agencies, school districts, and juvenile justice and child welfare facilities implement education and transition programs for youth who are neglected or delinquent (N or D) under the Elementary and Secondary Education Act (ESEA), as amended by the Every Student Succeeds Act (ESSA), Title I, Part D. The information will be used by ED to produce and disseminate a report detailing how state agencies, school districts, and juvenile justice and child welfare facilities implement educaiton and transition programs for youth who are neglected or delinquent (N or D).

Dated: August 18, 2016.

Kate Mullan,

Acting Director, Information Collection Clearance Division, Office of the Chief Privacy Officer, Office of Management.

[FR Doc. 2016–20163 Filed 8–23–16; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

[Docket No.: ED–2016–ICCD–0092]

Agency Information Collection Activities; Comment Request; EDFacts Data Collection School Years 2016–17, 2017–18, and 2018–19

AGENCY: National Center for Education Statistics (NCES), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing a revision of an existing information collection.

DATES: Interested persons are invited to submit comments on or before October 24, 2016.

ADDRESSES: To access and review all the documents related to the information collection listed in this notice, please use *http://www.regulations.gov* by searching the Docket ID number ED–2016–ICCD–0092. Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at *http://www.regulations.gov* by selecting the Docket ID number or via postal mail, commercial delivery, or hand delivery. *Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted.* Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Room 2E–349, Washington, DC 20202–4537.

FOR FURTHER INFORMATION CONTACT: For specific questions related to collection activities, please contact NCES Information Collections at *NCES.Information.Collections@ed.gov.*

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: EDFacts Data Collection School Years 2016–17, 2017–18, and 2018–19.

OMB Control Number: 1850–0925.

Type of Review: A revision of an existing information collection.

Respondents/Affected Public: State, Local, and Tribal Governments.

Total Estimated Number of Annual Responses: 61.

Total Estimated Number of Annual Burden Hours: 126,800.

Abstract: EDFacts is a U.S. Department of Education (ED) initiative to collect, analyze, report on and promote the use of high-quality, pre-kindergarten through grade 12 (pre-K–12) performance data for use in education planning, policymaking, and management and budget decision making to improve outcomes for students. EDFacts enables the National Center for Education Statistics (NCES) to report on students, schools, staff, services, and education outcomes at the state, district, and school levels, by centralizing data provided by state education agencies, local education agencies, and schools. This centralized approach provides ED users with the ability to efficiently analyze and report on submitted data and has reduced the reporting burden for state and local data producers through the use of streamlined data collection, analysis, and reporting tools. EDFacts collects information on behalf of ED grant and program offices for approximately 180 data groups for all 50 states, Washington DC, Puerto Rico, and seven outlying areas and freely associated states (American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Commonwealth of the Northern Mariana Islands, Republic of Palau, and the U.S. Virgin Islands), the Department of Defense Education Activity (DoDEA), and the Bureau of Indian Education (BIE). NCES seeks authorization from OMB to revise its EDFacts data collection and is requesting a new clearance for the 2016–17, 2017–18, and 2018–19 school years in order to support the Elementary and Secondary Act (ESEA), as amended by the Every Student Succeeds Act (ESSA) in December, 2015. This collection package will be available for public comment during two open periods, a 60 day and a 30 day, and revisions will be made accordingly. This submission includes a few proposed changes to the EDFacts data collection. In addition to reviewing the proposed changes (detailed in Attachment C and the B Attachments), ED requests that SEAs and other stakeholders respond to the directed questions found in Attachment D.

Dated: August 19, 2016.

Tomakie Washington,

Acting Director, Information Collection Clearance Division, Office of the Chief Privacy Officer, Office of Management.

[FR Doc. 2016–20249 Filed 8–23–16; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #1

Take notice that the Commission received the following electric rate filings:

Docket Numbers: ER16–1609–001.
Applicants: ID SOLAR 1, LLC.
Description: Report Filing: Supplement to 2 to be effective N/A.
Filed Date: 8/17/16.
Accession Number: 20160817–5350.
Comments Due: 5 p.m. ET 9/7/16.

Docket Numbers: ER16–1888–002.
Applicants: Tidal Energy Marketing Inc.
Description: Tariff Amendment: Amendment to be effective 8/6/2016.
Filed Date: 8/17/16.
Accession Number: 20160817–5330.
Comments Due: 5 p.m. ET 8/31/16.

Docket Numbers: ER16–2436–000.
Applicants: Mesquite Solar 3, LLC.
Description: § 205(d) Rate Filing: Notice of Non-Material Change in Status to be effective 5/20/2016.
Filed Date: 8/16/16.
Accession Number: 20160816–5228.
Comments Due: 5 p.m. ET 9/6/16.

Docket Numbers: ER16–2437–000.
Applicants: Alcoa Power Generating Inc.
Description: Alcoa Power Generating Inc. (Tapoca Division) submits Request for Waiver of Order No. 1000 Requirements.
Filed Date: 8/16/16.
Accession Number: 20160816–5272.
Comments Due: 5 p.m. ET 9/6/16.

Docket Numbers: ER16–2438–000.
Applicants: Pedricktown Cogeneration Company LP.
Description: Compliance filing: Reactive Service Resubmittal to be effective 9/13/2016.
Filed Date: 8/17/16.
Accession Number: 20160817–5382.
Comments Due: 5 p.m. ET 9/7/16.

Docket Numbers: ER16–2439–000.
Applicants: H.A. Wagner LLC.
Description: Compliance filing: Reactive Tariff Resubmittal to be effective 9/13/2016.
Filed Date: 8/17/16.
Accession Number: 20160817–5386.
Comments Due: 5 p.m. ET 9/7/16.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: August 17, 2016.

Kimberly D. Bose,

Secretary.

[FR Doc. 2016–20280 Filed 8–23–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Filings Instituting Proceedings

Docket Numbers: RP16–1168–000.
Applicants: Midcontinent Express Pipeline LLC.
Description: § 4(d) Rate Filing: Buy Out Language Filing to be effective 9/10/2016.
Filed Date: 8/11/16.
Accession Number: 20160811–5062.
Comments Due: 5 p.m. ET 8/23/16.

Docket Numbers: RP16–1169–000.
Applicants: Texas Eastern Transmission, LP.
Description: § 4(d) Rate Filing: Negotiated Rates—8–12–2016 revision for Sequent Contract 911362 to be effective 8/12/2016.
Filed Date: 8/11/16.
Accession Number: 20160811–5156.
Comments Due: 5 p.m. ET 8/23/16.

Docket Numbers: RP16–1170–000.
Applicants: Northern Natural Gas Company.
Description: § 4(d) Rate Filing: 20160811 Carlton Flow Obligations to be effective 11/1/2016.
Filed Date: 8/11/16.
Accession Number: 20160811–5190.
Comments Due: 5 p.m. ET 8/23/16.

Docket Numbers: RP16–1171–000.
Applicants: Midcontinent Express Pipeline LLC.
Description: § 4(d) Rate Filing: Removal of Expiring Devon Agreement to be effective 9/1/2016.
Filed Date: 8/12/16.
Accession Number: 20160812–5048.
Comments Due: 5 p.m. ET 8/24/16.

Docket Numbers: RP16–1172–000.
Applicants: ANR Storage Company.
Description: Compliance filing ANRSC Compliance to Docket No. CP16–469 (Abandonment of Service) to be effective 7/1/2016.
Filed Date: 8/12/16.
Accession Number: 20160812–5057.
Comments Due: 5 p.m. ET 8/24/16.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: August 15, 2016.

Kimberly D. Bose,

Secretary.

[FR Doc. 2016–20286 Filed 8–23–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 2785–092]

Boyce Hydro Power, LLC; Notice of Application Accepted for Filing and Soliciting Comments, Motions To Intervene, and Protests

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. *Application Type:* Recreation Plan.
b. *Project No:* 2785–092.
c. *Date Filed:* August 16, 2016, as supplemented August 17, 2016.
d. *Applicant:* Boyce Hydro Power, LLC.
e. *Name of Project:* Sandford Water Power Project.
f. *Location:* The project is located on the Tittabawssee River in Midland County, Michigan.
g. *Filed Pursuant to:* Federal Power Act, 16 U.S.C. 791a–825r.

h. *Applicant Contact:* Frank Christie, General Manager, Boyce Hydro Power, LLC, 6000 S. M–30, P.O. Box 15, Edenville, MI 48620, (989) 689–3161.

i. *FERC Contact:* Mr. Mark Pawlowski, (202) 502–6052, *mark.pawlowski@ferc.gov.*

j. *Deadline for filing comments, motions to intervene, and protests:* September 2, 2016.

The Commission strongly encourages electronic filing. Please file comments, motions to intervene, and protests using the Commission's eFiling system at *http://www.ferc.gov/docs-filing/efiling.asp.* Commenters can submit brief comments up to 6,000 characters, without prior registration, using the eComment system at *http://www.ferc.gov/docs-filing/ecomment.asp.* You must include your name and contact information at the end of your comments. For assistance, please contact FERC Online Support at *FERCOnlineSupport@ferc.gov,* (866) 208–3676 (toll free), or (202) 502–8659 (TTY). In lieu of electronic filing, please send a paper copy to: Secretary, Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426. The first page of any filing should include docket number P–2785–092.

The Commission's Rules of Practice and Procedure require all intervenors filing documents with the Commission to serve a copy of that document on each person whose name appears on the official service list for the project. Further, if an intervenor files comments or documents with the Commission relating to the merits of an issue that may affect the responsibilities of a particular resource agency, they must also serve a copy of the document on that resource agency.

k. *Description of Request:* The licensee filed a request for Commission approval of a temporary variance of the reservoir water surface elevation of the Sanford Water Power Project required by article 411 of the project's license. To facilitate repair of the Edenville dam spillway located upstream of Sandford dam, the licensee requests to draw down the Sandford reservoir 3 feet to its winter elevation of 622 feet National Geodetic Vertical Datum (NGVD) beginning September 15, 2016. Because the licensee does not anticipate completing the work by November 15, the licensee would not return to reservoir to its normal water surface elevation of 625 feet NGVD until just prior to the surface water temperature of the reservoir reaching 39 degrees Fahrenheit as required by article 411 of the license

l. *Locations of the Application:* A copy of the application is available for inspection and reproduction at the Commission's Public Reference Room, located at 888 First Street NE., Room 2A, Washington, DC 20426, or by calling (202) 502–8371. This filing may also be viewed on the Commission's Web site at *http://www.ferc.gov* using the "eLibrary" link. Enter the docket number excluding the last three digits in the docket number field to access the document. You may also register online at *http://www.ferc.gov/docs-filing/esubscription.asp* to be notified via email of new filings and issuances related to this or other pending projects. For assistance, call 1–866–208–3676 or email *FERCOnlineSupport@ferc.gov,* for TTY, call (202) 502–8659. A copy is also available for inspection and reproduction at the address in item (h) above. Agencies may obtain copies of the application directly from the applicant.

m. Individuals desiring to be included on the Commission's mailing list should so indicate by writing to the Secretary of the Commission.

n. *Comments, Protests, or Motions To Intervene:* Anyone may submit comments, a protest, or a motion to intervene in accordance with the requirements of Rules of Practice and Procedure, 18 CFR 385.210, 385.211, and 385.214, respectively. In determining the appropriate action to take, the Commission will consider all protests or other comments filed, but only those who file a motion to intervene in accordance with the Commission's Rules may become a party to the proceeding. Any comments, protests, or motions to intervene must be received on or before the specified comment date for the particular application.

o. *Filing and Service of Documents:* Any filing must (1) bear in all capital letters the title "COMMENTS", "PROTEST", or "MOTION TO INTERVENE" as applicable; (2) set forth in the heading the name of the applicant and the project number of the application to which the filing responds; (3) furnish the name, address, and telephone number of the person commenting, protesting or intervening; and (4) otherwise comply with the requirements of 18 CFR 385.2001 through 385.2005. All comments, motions to intervene, or protests must set forth their evidentiary basis. Any filing made by an intervenor must be accompanied by proof of service on all persons listed in the service list prepared by the Commission in this proceeding, in accordance with 18 CFR 385.2010.

Dated: August 18, 2016.

Kimberly D. Bose,

Secretary.

[FR Doc. 2016–20283 Filed 8–23–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Filings Instituting Proceedings

Docket Numbers: RP10–996–000.
Applicants: Dominion Cove Point LNG, LP.
Description: Report Filing: DCP–2016 Report of Operational Sales and Purchases of Gas.
Filed Date: 7/29/16.
Accession Number: 20160729–5131.
Comments Due: 5 p.m. ET 8/10/16.

Docket Numbers: RP16–1161–000.
Applicants: Alliance Pipeline L.P.
Description: § 4(d) Rate Filing: Negotiated Rate Interruptible Service to be effective 8/1/2016.
Filed Date: 8/4/16.
Accession Number: 20160804–5039.
Comments Due: 5 p.m. ET 8/16/16.

Docket Numbers: RP16–1162–000.
Applicants: Gulf Crossing Pipeline Company LLC.
Description: § 4(d) Rate Filing: Chesapeake Mutual Termination of Firm and Neg Rate Agmts to be effective 9/1/2016.
Filed Date: 8/5/16.
Accession Number: 20160805–5075.
Comments Due: 5 p.m. ET 8/15/16.

Docket Numbers: RP16–1163–000.
Applicants: East Tennessee Natural Gas, LLC.
Description: Compliance filing Loudon Expansion Recourse Rates in CP15–91–000 to be effective 9/1/2016.
Filed Date: 8/5/16.
Accession Number: 20160805–5097.
Comments Due: 5 p.m. ET 8/17/16.

Docket Numbers: RP16–1164–000.
Applicants: East Tennessee Natural Gas, LLC.
Description: § 4(d) Rate Filing: Negotiated Rate for Tate & Lyle Contract 410576 to be effective 9/1/2016.
Filed Date: 8/5/16.
Accession Number: 20160805–5101.
Comments Due: 5 p.m. ET 8/17/16.

Docket Numbers: RP16–1165–000.
Applicants: Guardian Pipeline, L.L.C.
Description: § 4(d) Rate Filing: Revisions to Rate Schedules and GT&C to be effective 9/7/2016.

Filed Date: 8/5/16.

Accession Number: 20160805–5154.

Comments Due: 5 p.m. ET 8/17/16.

Docket Numbers: RP16–1166–000.

Applicants: Rockies Express Pipeline LLC.

Description: § 4(d) Rate Filing: Neg Rate 2016–08–05 CP to be effective 8/6/2016.

Filed Date: 8/5/16.

Accession Number: 20160805–5176.

Comments Due: 5 p.m. ET 8/17/16.

Docket Numbers: RP16–1167–000.

Applicants: Algonquin Gas Transmission, LLC.

Description: § 4(d) Rate Filing: AGT Signature Block Modification to be effective 9/9/2016.

Filed Date: 8/9/16.

Accession Number: 20160809–5103.

Comments Due: 5 p.m. ET 8/22/16.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

Filings in Existing Proceedings

Docket Numbers: RP16–961–001.

Applicants: Gulf South Pipeline Company, LP.

Description: Compliance filing Compliance Filing in Docket No. RP16–961–000 to be effective 8/1/2016.

Filed Date: 8/9/16.

Accession Number: 20160809–5143.

Comments Due: 5 p.m. ET 8/22/16.

Any person desiring to protest in any of the above proceedings must file in accordance with Rule 211 of the Commission's Regulations (18 CFR 385.211) on or before 5 p.m. Eastern time on the specified comment date.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf*. For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: August 10, 2016.

Kimberly D. Bose,

Secretary.

[FR Doc. 2016–20285 Filed 8–23–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Notice of Commission Staff Attendance

The Federal Energy Regulatory Commission (Commission) hereby gives notice that members of the Commission's staff will attend the following meeting related to the Midcontinent Independent System Operator, Inc. (MISO)—PJM Interconnection, L.L.C. (PJM) Joint and Common Market Initiative (Docket No. AD14–3–000):

MISO/PJM Joint Stakeholder Meeting—August 23, 2016.

The above-referenced meeting will be held at: PJM Conference & Training Center, 2750 Monroe Boulevard, Audubon, PA 19403.

The above-referenced meeting is open to the public.

Further information may be found at *www.pjm.com*.

The discussions at the meeting described above may address matters at issue in the following proceedings:

Docket No. EL13–88, Northern Indiana Public Service Company v. *Midcontinent Independent System Operator, Inc. and PJM Interconnection, L.L.C.*

Docket No. ER11–1844, Midwest Independent Transmission System Operator, Inc.

Docket Nos. ER13–1924, ER13–1926, ER13–1944, ER15–2200, PJM Interconnection, L.L.C.

Docket No. ER14–1736, Midcontinent Independent System Operator, Inc.

Docket Nos. EL15–99, EL16–12, Internal MISO Generation v. *Midcontinent Independent System Operator, Inc.*

Docket No. ER16–1967–000, PJM Interconnection, L.L.C.

Docket No. ER10–1791, Midwest Independent Transmission System Operator, Inc.

Docket No. ER16–1969, Midcontinent Independent System Operator, Inc.

For more information, contact Bahaa Seireg, Office of Energy Policy and Innovation, Federal Energy Regulatory Commission at (202) 502–8739 or *Bahaa.Seireg@ferc.gov*.

Dated: August 17, 2016.

Kimberly D. Bose,

Secretary.

[FR Doc. 2016–20279 Filed 8–23–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #1

Take notice that the Commission received the following electric corporate filings:

Docket Numbers: EC16–167–000.

Applicants: CPV Towantic, LLC, Towantic Energy Holdings, LLC, Aircraft Services Corporation, Ullico Infrastructure Master Fund, L.P.

Description: Application for Authorization Under Section 203 of the Federal Power Act and Request for Waivers, Confidential Treatment, Expedited Action and Shortened Comment Period of CPV Towantic, LLC, et al.

Filed Date: 8/17/16.

Accession Number: 20160817–5442.

Comments Due: 5 p.m. ET 9/7/16.

Take notice that the Commission received the following electric rate filings:

Docket Numbers: ER13–108–001.

Applicants: Alcoa Power Generating Inc.

Description: Informational Filing of Alcoa Power Generating Inc. (Long Sault Division) Regarding Waiver of the Order No. 1000 Requirements.

Filed Date: 8/16/16.

Accession Number: 20160816–5277.

Comments Due: 5 p.m. ET 9/6/16.

Docket Numbers: ER16–2408–000.

Applicants: Midcontinent Independent System Operator, Inc.

Description: Correction to August 11, 2016 Notice of Termination of Large Generator Interconnection Agreement No. 1882 of Midcontinent Independent System Operator, Inc.

Filed Date: 8/16/16.

Accession Number: 20160816–5145.

Comments Due: 5 p.m. ET 9/1/16.

Docket Numbers: ER16–2440–000.

Applicants: Brandon Shores LLC.

Description: Compliance filing: Reactive Service Resubmittal to be effective 9/13/2016.

Filed Date: 8/17/16.

Accession Number: 20160817–5411.

Comments Due: 5 p.m. ET 9/7/16.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5:00 p.m. Eastern time on the specified comment date.

Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: August 18, 2016.

Kimberly D. Bose,

Secretary.

[FR Doc. 2016–20275 Filed 8–23–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 2232–633]

Duke Energy Carolinas, LLC; Notice of Application Accepted for Filing and Soliciting Comments, Motions To Intervene, and Protests

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. *Application Type:* Non-project use of project lands and waters.

b. *Project No:* 2232–633.

c. *Date Filed:* June 2, 2016.

d. *Applicant:* Duke Energy Carolinas, LLC.

e. *Name of Project:* Catawba-Wateree Hydroelectric Project.

f. *Location:* Lake Norman in Iredell County, North Carolina.

g. *Filed Pursuant to:* Federal Power Act, 16 U.S.C. 791a–825r.

h. *Applicant Contact:* Dennis Whitaker, Manager Lake Services, EC12Y, 526 S. Church Street, Charlotte, NC, 28201–1006, (704) 382–1594.

i. *FERC Contact:* Mark Carter, (678) 245–3083, *mark.carter@ferc.gov.*

j. *Deadline for filing comments, motions to intervene, and protests:* September 19, 2016.

The Commission strongly encourages electronic filing. Please file motions to intervene, protests, comments, or recommendations using the Commission's eFiling system at *http://www.ferc.gov/docs-filing/efiling.asp.* Commenters can submit brief comments up to 6,000 characters, without prior registration, using the eComment system at *http://www.ferc.gov/docs-filing/ecomment.asp.* You must include your name and contact information at the end of your comments. For assistance, please contact FERC Online Support at *FERCOnlineSupport@ferc.gov,* (866) 208–3676 (toll free), or (202) 502–8659 (TTY). In lieu of electronic filing, please send a paper copy to: Secretary, Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426. The first page of any filing should include docket number P–2232–633.

The Commission's Rules of Practice and Procedure require all intervenors filing documents with the Commission to serve a copy of that document on each person whose name appears on the official service list for the project. Further, if an intervenor files comments or documents with the Commission relating to the merits of an issue that may affect the responsibilities of a particular resource agency, they must also serve a copy of the document on that resource agency.

k. *Description of Request:* Duke Energy Carolinas, LLC proposes to permit the expansion of Stutts Marina from the existing 30 boat slips to a total of 146 boat slips distributed across 4 docks. Additionally, Duke would permit 14 addition personal watercraft slips, the expansion of an existing gasoline dock (with 3 boat slips), the addition of a five-foot-wide (*i.e.,* 3,707 square feet) boardwalk along the shoreline, and dredging of 4.8 acres (*i.e.,* 34,600 cubic yards of material) of shallow-water area near the shoreline. Additional work associated with the marina would be constructed outside the project boundary.

l. *Locations of the Application:* A copy of the application is available for inspection and reproduction at the Commission's Public Reference Room, located at 888 First Street NE., Room 2A, Washington, DC 20426, or by calling (202) 502–8371. This filing may also be viewed on the Commission's Web site at *http://www.ferc.gov* using the "eLibrary" link. Enter the docket number excluding the last three digits in the docket number field to access the document. You may also register online at *http://www.ferc.gov/docs-filing/esubscription.asp* to be notified via email of new filings and issuances related to this or other pending projects. For assistance, call 1–866–208–3676 or email *FERCOnlineSupport@ferc.gov,* for TTY, call (202) 502–8659. A copy is also available for inspection and reproduction at the address in item (h) above. Agencies may obtain copies of the application directly from the applicant.

m. Individuals desiring to be included on the Commission's mailing list should so indicate by writing to the Secretary of the Commission.

n. *Comments, Protests, or Motions to Intervene:* Anyone may submit comments, a protest, or a motion to intervene in accordance with the requirements of Rules of Practice and Procedure, 18 CFR 385.210, .211, .214, respectively. In determining the appropriate action to take, the Commission will consider all protests or other comments filed, but only those who file a motion to intervene in accordance with the Commission's Rules may become a party to the proceeding. Any comments, protests, or motions to intervene must be received on or before the specified comment date for the particular application.

o. *Filing and Service of Documents:* Any filing must (1) bear in all capital letters the title "COMMENTS", "PROTEST", or "MOTION TO INTERVENE" as applicable; (2) set forth in the heading the name of the applicant and the project number of the application to which the filing responds; (3) furnish the name, address, and telephone number of the person commenting, protesting or intervening; and (4) otherwise comply with the requirements of 18 CFR 385.2001 through 385.2005. All comments, motions to intervene, or protests must set forth their evidentiary basis. Any filing made by an intervenor must be accompanied by proof of service on all persons listed in the service list prepared by the Commission in this proceeding, in accordance with 18 CFR 385.2010.

Dated: August 18, 2016.

Kimberly D. Bose,

Secretary.

[FR Doc. 2016–20282 Filed 8–23–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. ER16–1649–000]

California Independent System, Operator Corporation; Supplemental Notice of Agenda and Discussion Topics for Staff Technical Conference

This notice establishes the agenda and topics for discussion at the technical conference to be held on September 16, 2016 to discuss issues related to the measures implemented by the California Independent System Operator Corporation (CAISO) to address the limited availability of the Aliso Canyon natural gas storage facility.[1] The technical conference will be held from 10:00 a.m. to 4:00 p.m. (EDT) in the

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[1] *Cal. Indep. Sys. Operator Corp.*, 155 FERC ¶ 61,224 (2016) (June 1 Order).

Commission Meeting Room at the Commission's headquarters, 888 First Street NE., Washington, DC. The technical conference will be led by Commission staff. All interested parties are invited to attend, and registration is not required.

The purpose of the technical conference is to provide Commission staff and interested parties an opportunity to discuss lessons learned regarding the efficacy of and the need for retention of any of the instant tariff revisions accepted by the Commission in the June 1 Order as well as potential longer-term solutions to address any ongoing limitations at the Aliso Canyon facility. The topics and related questions to be discussed during this conference are attached. No formal presentations will be made other than an opening presentation by CAISO and its Department of Market Monitoring; however, attendees will be encouraged to participate in the discussion along with Commission staff, time permitting. Attendees may also submit questions or potential discussion topics in the docket prior to the technical conference. Any such submissions should be made no later than one week prior to the conference and will be for discussion purposes only, time permitting.

This conference will be transcribed and webcast. Transcripts will be available immediately for a fee from Ace Reporting Company ((202) 347–3700). A link to the webcast of this event will be available in the Commission Calendar of Events at *www.ferc.gov.* The Capitol Connection provides technical support for the webcasts and offers the option of listening to the conferences via phone-bridge for a fee. For additional information, visit *www.CapitolConnection.org* or call (703) 993–3100. Parties attending the conference via webcast will have the opportunity to submit questions during the conference via email Virginia Castro at *virginia.castro@ferc.gov.*

FERC conferences are accessible under section 508 of the Rehabilitation Act of 1973. For accessibility accommodations please send an email to *accessibility@ferc.gov* or call toll free 1–866–208–3372 (voice) or 202–502–8659 (TTY), or send a fax to 202–208–2106 with the required accommodations.

For more information on this conference, please contact Virginia Castro at (202) 502–8491, *virginia.castro@ferc.gov,* or Sarah McKinley at (202) 502–8368, *sarah.mckinley@ferc.gov.*

Dated: August 17, 2016.

Kimberly D. Bose,

Secretary.

[FR Doc. 2016–20277 Filed 8–23–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. ID–4482–004; Docket No. ID–7981–000]

Huskilson, Christopher G.; Blunden, Gregory W.; Notice of Filing

Take notice that on August 18, 2016, Christopher G. Huskilson and Gregory W. Blunden submitted for filing, an application for authority to hold interlocking positions, pursuant to section 305(b) of the Federal Power Act, 16 U.S.C. 825d(b) and section 45.8 of the Federal Energy Regulatory Commission's (Commission) Rules of Practice and Procedure, 18 CFR part 45.8.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. On or before the comment date, it is not necessary to serve motions to intervene or protests on persons other than the Applicant.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at *http://www.ferc.gov.* Persons unable to file electronically should submit an original and 5 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426.

This filing is accessible on-line at *http://www.ferc.gov,* using the "eLibrary" link and is available for electronic review in the Commission's Public Reference Room in Washington, DC. There is an "eSubscription" link on the Web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email *FERCOnlineSupport@ferc.gov,* or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Comment Date: 5:00 p.m. Eastern Time on September 8, 2016.

Dated: August 18, 2016.

Kimberly D. Bose,

Secretary.

[FR Doc. 2016–20278 Filed 8–23–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP16–491–000]

National Fuel Gas Supply Corporation; Notice of Request Under Blanket Authorization

Take notice that on August 11, 2016, National Fuel Gas Supply Corporation (National Fuel), 6363 Main Street, Williamsville, New York 14221 filed in Docket No. CP16–491–000, filed a prior notice request pursuant to sections 157.205 and 157.216 of the Federal Energy Regulatory Commission's regulations under the Natural Gas Act (NGA) and National Fuel's blanket authorizations issued in Docket Nos. CP83–4–000. National Fuel seeks authorization to abandon on injection/withdraw storage well and abandon in place the associated well line, all as more fully set forth in the application which is on file with the Commission and open to public inspection. The filing may also be viewed on the web at *http://www.ferc.gov* using the "eLibrary" link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, contact FERC at *FERCOnlineSupport@ferc.gov* or call toll-free, (866) 208–3676 or TTY, (202) 502–8659.

National Fuel proposes to abandon facilities in its Henderson Storage Field, located in Mercer County, Pennsylvania. National Fuel proposes to plug and abandon one injection/withdrawal storage well, Well 622, and abandon in place the associated well line NW–622H. National Fuel states that based on the excessive cost to rehabilitate this well, it claims that the most prudent course of action is to plug and abandon it and that the proposed abandonment will not result in a material decrease in service to customers.

Any questions regarding this Application should be directed to Kenneth E. Webster, Attorney for National Fuel, 6363 Main Street, Williamsville, New York 14221, by phone (716) 857–7067, by fax (716) 857–

7206, or by email at *websterk@natfuel.com.*

Any person or the Commission's Staff may, within 60 days after the issuance of the instant notice by the Commission, file pursuant to Rule 214 of the Commission's Procedural Rules (18 CFR 385.214) a motion to intervene or notice of intervention and, pursuant to section 157.205 of the Commission's Regulations under the NGA (18 CFR 157.205) a protest to the request. If no protest is filed within the time allowed therefore, the proposed activity shall be deemed to be authorized effective the day after the time allowed for protest. If a protest is filed and not withdrawn within 30 days after the time allowed for filing a protest, the instant request shall be treated as an application for authorization pursuant to section 7 of the NGA.

Pursuant to Section 157.9 of the Commission's rules, 18 CFR 157.9, within 90 days of this Notice the Commission staff will either: Complete its environmental assessment (EA) and place it into the Commission's public record (eLibrary) for this proceeding, or issue a Notice of Schedule for Environmental Review. If a Notice of Schedule for Environmental Review is issued, it will indicate, among other milestones, the anticipated date for the Commission staff's issuance of the final environmental impact statement (FEIS) or EA for this proposal. The filing of the EA in the Commission's public record for this proceeding or the issuance of a Notice of Schedule for Environmental Review will serve to notify federal and state agencies of the timing for the completion of all necessary reviews, and the subsequent need to complete all federal authorizations within 90 days of the date of issuance of the Commission staff's FEIS or EA.

Persons who wish to comment only on the environmental review of this project should submit an original and two copies of their comments to the Secretary of the Commission. Environmental commenters will be placed on the Commission's environmental mailing list, will receive copies of the environmental documents, and will be notified of meetings associated with the Commission's environmental review process. Environmental commenters will not be required to serve copies of filed documents on all other parties. However, the non-party commenters will not receive copies of all documents filed by other parties or issued by the Commission (except for the mailing of environmental documents issued by the Commission) and will not have the right to seek court review of the Commission's final order.

The Commission strongly encourages electronic filings of comments, protests, and interventions via the internet in lieu of paper. See 18 CFR 385.2001(a) (1) (iii) and the instructions on the Commission's Web site (*www.ferc.gov*) under the "e-Filing" link. Persons unable to file electronically should submit an original and 5 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426.

Dated: August 18, 2016.

Kimberly D. Bose,

Secretary.

[FR Doc. 2016–20276 Filed 8–23–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Filings Instituting Proceedings

Docket Number: PR16–61–001.
Applicants: Black Hills Gas Distribution LLC.
Description: Tariff filing per 284.123(b), (e): Amended Statement of Operation Conditions to be effective 6/1/2016; Filing Type: 1270.
Filed Date: 8/15/2016.
Accession Number: 201608155177, *http://elibrary.ferc.gov/idmws/doc_info.asp?accession_num=20160415-5222.*
Comments Due: 5 p.m. ET 9/2/16.
284.123(g) Protests Due: 5 p.m. ET 9/2/16.

Docket Numbers: RP16–1173–000.
Applicants: First ECA Midstream LLC.
Description: Compliance filing Tariff filing in compliance with Docket No. CP16–35–000 to be effective 9/15/2016.
Filed Date: 8/16/16.
Accession Number: 20160816–5245.
Comments Due: 5 p.m. ET 8/29/16.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5 p.m. Eastern time on the specified date(s). Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: August 17, 2016.

Kimberly D. Bose,

Secretary.

[FR Doc. 2016–20287 Filed 8–23–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 10821–004]

Pacific Gas & Electric Company; Notice of Intent To File License Application, Filing of Pre-Application Document, Approving Use of the Traditional Licensing Process

a. *Type of Filing:* Notice of Intent to a File License Application and Request to Use the Traditional Licensing Process.

b. *Project No.:* 10821–004.

c. *Date Filed:* June 30, 2016.

d. *Submitted By:* Pacific Gas & Electric Company (PG&E).

e. *Name of Project:* Camp Far West Transmission Line Project.

f. *Location:* The project is a transmission line-only project located in Placer and Yuba Counties, California. The project occupies 10.9 acres of federal land administered by Beale Air Force Base, Department of Defense.

g. *Filed Pursuant to:* 18 CFR 5.3 of the Commission's regulations.

h. *Potential Applicant Contact:* Mark Stewart, Electric FERC License Coordinator, 4636 Missouri Flat Road, Placerville, CA 95667; (530) 621–7243; email—*m9s5@pge.com.*

i. *FERC Contact:* Quinn Emmering at (202) 502–6382; or email at *quinn.emmering@ferc.gov.*

j. PG&E filed its request to use the Traditional Licensing Process on June 30, 2016. PG&E provided public notice of its request on June 9 and June 10, 2016. In a letter dated August 18, 2016, the Director of the Division of Hydropower Licensing approved PG&E's request to use the Traditional Licensing Process.

k. With this notice, we are initiating informal consultation with the U.S. Fish and Wildlife Service and NOAA Fisheries under section 7 of the

Endangered Species Act and the joint agency regulations thereunder at 50 CFR, Part 402; and NOAA Fisheries under section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act and implementing regulations at 50 CFR 600.920. We are also initiating consultation with the California State Historic Preservation Officer, as required by section 106, National Historic Preservation Act, and the implementing regulations of the Advisory Council on Historic Preservation at 36 CFR 800.2.

l. With this notice, we are designating PG&E as the Commission's non-federal representative for carrying out informal consultation pursuant to section 7 of the Endangered Species Act and section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act; and consultation pursuant to section 106 of the National Historic Preservation Act.

m. PG&E filed a Pre-Application Document (PAD; including a proposed process plan and schedule) with the Commission, pursuant to 18 CFR 5.6 of the Commission's regulations.

n. A copy of the PAD is available for review at the Commission in the Public Reference Room or may be viewed on the Commission's Web site (*http://www.ferc.gov*), using the "eLibrary" link. Enter the docket number, excluding the last three digits in the docket number field to access the document. For assistance, contact FERC Online Support at *FERCONlineSupport@ferc.gov,* (866) 208–3676 (toll free), or (202) 502–8659 (TTY). A copy is also available for inspection and reproduction at the address in paragraph h.

o. The licensee states its unequivocal intent to submit an application for a new license for Project No. 10821–004. Pursuant to 18 CFR 16.8, 16.9, and 16.10 each application for a new license and any competing license applications must be filed with the Commission at least 24 months prior to the expiration of the existing license. All applications for licensing this project must be filed by June 30, 2019.

p. Register online at *http://www.ferc.gov/docs-filing/esubscription.asp* to be notified via email of new filing and issuances related to this or other pending projects. For assistance, contact FERC Online Support.

Dated: August 18, 2016.

Kimberly D. Bose,

Secretary.

[FR Doc. 2016–20284 Filed 8–23–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. OR16–22–000]

EnLink Crude Pipeline, LLC; Notice of Petition for Declaratory Order

Take notice that on August 16, 2016, pursuant to Rule 207(a)(2) of the Federal Energy Regulatory Commission's (Commission) Rules of Practice and Procedure, 18 CFR 385.207(a)(2) (2015), EnLink Crude Pipeline, LLC ("EnLink"), filed a petition for a declaratory order approving the overall tariff and rate structure for EnLink's new pipeline system in the Midland Basin in Texas that will gather and transport crude oil from origin points located in Upton County, Texas and Midland County, Texas to the SunVit Midland Terminal and the Enterprise Midland Terminal, both in Midland County, Texas, all as more fully explained in the petition.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. Anyone filing a motion to intervene or protest must serve a copy of that document on the Petitioner.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at *http://www.ferc.gov.* Persons unable to file electronically should submit an original and 5 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426.

This filing is accessible on-line at *http://www.ferc.gov,* using the "eLibrary" link and is available for review in the Commission's Public Reference Room in Washington, DC. There is an "eSubscription" link on the Web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email *FERCOnlineSupport@ferc.gov,* or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Comment Date: 5 p.m. Eastern time on September 16, 2016.

Dated: August 18, 2016.

Kimberly D. Bose,

Secretary.

[FR Doc. 2016–20281 Filed 8–23–16; 8:45 am]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPP–2016–0427; FRL–9950–47]

Public Meeting; Data That Support the Registration of Plant-Incorporated Protectants (PIPs)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Environmental Protection Agency (EPA) will hold a one-day public symposium on the types of data that support the registration of plant-incorporated protectants (PIPs). The symposium is open to the public and can be attended in person and online.

DATES: The meeting will be held on September 29, 2016, from approximately 9:00 a.m. to 5:00 p.m. Sign-in begins at 8:30 a.m.

If you wish to participate in person, we encourage registration on or before September 26, 2016.

If you wish to attend in person and would like to request accommodation for a disability, please follow the registration link under III. How Can I Request to Participate in this Meeting? and follow the prompts for in-person attendance. In order to give EPA as much time as possible to process your request, we encourage participants to request accommodations at least 10 days prior to the meeting.

ADDRESSES: The meeting will be held at the Environmental Protection Agency, Conference Center Room S1204/06, Lobby Level, One Potomac Yard (South Bldg.), 2777 S. Crystal Dr., Arlington, VA 22202.

FOR FURTHER INFORMATION CONTACT: Wiebke Tapken, Biopesticides and Pollution Prevention Division (7511P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; main telephone number: (703) 305–7090; email address: *BPPDFRNotices@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

This action is directed to the public in general. This action may, however, be of interest to persons who are or may be required to conduct testing of pesticidal substances under the Federal Food, Drug, and Cosmetic Act (FFDCA) and/or the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Since other entities may also be interested, the Agency has not attempted to describe all the specific entities that may be affected by this action.

B. How can I get copies of this document and other related information?

The docket for this action, identified by docket identification (ID) number EPA–HQ–OPP–2016–0427, is available at *http://www.regulations.gov* or at the Office of Pesticide Programs Regulatory Public Docket (OPP Docket) in the Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW., Washington, DC 20460–0001. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the OPP Docket is (703) 305–5805. Please review the visitor instructions and additional information about the docket available at *http://www.epa.gov/dockets.*

II. Background

The purpose of the symposium is to provide a forum for biotechnology developers, the agricultural sector, researchers, and the public, to receive first-hand information on the scope of the scientific pesticide application review process that determines the safety of PIPs, including the type of data EPA typically needs to make a regulatory decision. We anticipate that this symposium and the information being presented will promote transparency, clarity, and consistency for EPA's regulation of PIPs. The symposium will provide opportunities for the audience to ask questions on each of the topics covered. EPA is not requesting public comment or advice on the materials being presented during the symposium. Following the meeting, the materials that will be presented will be made available in docket ID No. EPA–HQ–OPP–2016–0427.

III. How can I request to participate in this meeting?

No fees are associated with the attendance of the symposium. You may request to participate online and in-person by referring to this link and following the prompts: *https://www.epa.gov/regulation-biotechnology-under-tsca-and-fifra/plant-incorporated-protectants-data-requirements.*

Authority: 7 U.S.C. 136.

Dated: August 16, 2016.

Mark A. Hartman,

Acting Director, Biopesticides and Pollution Prevention Division, Office of Pesticide Programs.

[FR Doc. 2016–20305 Filed 8–23–16; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPPT–2016–0481; FRL–9950–88]

Certain New Chemicals; Receipt and Status Information for July 2016

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: EPA is required under the Toxic Substances Control Act (TSCA) to publish in the **Federal Register** a notice of receipt of a premanufacture notice (PMN); an application for a test marketing exemption (TME), both pending and/or expired; and a periodic status report on any new chemicals under EPA review and the receipt of notices of commencement (NOC) to manufacture those chemicals. This document covers the period from July 1, 2016 to July 29, 2016.

DATES: Comments identified by the specific case number provided in this document, must be received on or before September 23, 2016.

ADDRESSES: Submit your comments, identified by docket identification (ID) number EPA–HQ–OPPT–2016–2016–0481, and the specific PMN number or TME number for the chemical related to your comment, by one of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the online instructions for submitting comments. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.
- *Mail:* Document Control Office (7407M), Office of Pollution Prevention and Toxics (OPPT), Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001.
- *Hand Delivery:* To make special arrangements for hand delivery or delivery of boxed information, please follow the instructions at *http://www.epa.gov/dockets/contacts.html.*

Additional instructions on commenting or visiting the docket, along with more information about dockets generally, is available at *http://www.epa.gov/dockets.*

FOR FURTHER INFORMATION CONTACT: *For technical information contact:* Jim Rahai, IMD, 7407M, Office of Pollution Prevention and Toxics, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; telephone number: (202) 564–8593; email address: *rahai.jim@epa.gov.*

For general information contact: The TSCA-Hotline, ABVI-Goodwill, 422 South Clinton Ave. Rochester, NY 14620; telephone number: (202) 554–1404; email address: *TSCA-Hotline@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

This action is directed to the public in general. As such, the Agency has not attempted to describe the specific entities that this action may apply to. Although others may be affected, this action applies directly to the submitters of the actions addressed in this document.

B. What should I consider as I prepare my comments for EPA?

1. *Submitting CBI.* Do not submit this information to EPA through regulations.gov or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD–ROM that you mail to EPA, mark the outside of the disk or CD–ROM as CBI and then identify electronically within the disk or CD–ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. *Tips for preparing your comments.* When preparing and submitting your comments, see the commenting tips at *http://www.epa.gov/dockets/comments.html.*

II. What action is the agency taking?

This document provides receipt and status reports, which cover the period from July 1, 2016 to July 29, 2016, and consists of the PMNs and TMEs both pending and/or expired, and the NOCs to manufacture a new chemical that the Agency has received under TSCA section 5 during this time period.

III. What is the agency's authority for taking this action?

Under TSCA, 15 U.S.C. 2601 *et seq.*, EPA classifies a chemical substance as either an "existing" chemical or a "new" chemical. Any chemical substance that is not on EPA's TSCA Inventory is classified as a "new chemical," while those that are on the TSCA Inventory are classified as an "existing chemical." For more information about the TSCA Inventory, please go to: *http://www.epa.gov/opptintr/newchems/pubs/inventory.htm.*

Anyone who plans to manufacture or import a new chemical substance for a non-exempt commercial purpose is required by TSCA section 5 to provide EPA with a PMN, before initiating the activity. Section 5(h)(1) of TSCA authorizes EPA to allow persons, upon application, to manufacture (includes import) or process a new chemical substance, or a chemical substance subject to a significant new use rule (SNUR) issued under TSCA section 5(a), for "test marketing" purposes, which is referred to as a test marketing exemption, or TME. For more information about the requirements applicable to a new chemical go to: *http://www.epa.gov/oppt/newchems.*

Under TSCA sections 5(d)(2) and 5(d)(3), EPA is required to publish in the **Federal Register** a notice of receipt of a PMN or an application for a TME and to publish in the **Federal Register** periodic reports on the status of new chemicals under review and the receipt of NOCs to manufacture those chemicals.

IV. Receipt and Status Reports

As used in each of the tables in this unit, (S) indicates that the information in the table is the specific information provided by the submitter, and (G) indicates that the information in the table is generic information because the specific information provided by the submitter was claimed as CBI.

For the 58 PMNs received by EPA during this period, Table 1 provides the following information (to the extent that such information is not claimed as CBI): The EPA case number assigned to the PMN; the date the PMN was received by EPA; the projected end date for EPA's review of the PMN; the submitting manufacturer/importer; the potential uses identified by the manufacturer/importer in the PMN; and the chemical identity.

TABLE 1—PMNS RECEIVED FROM JULY 1, 2016 TO JULY 29, 2016

Case No.	Date received	Projected end date for EPA review	Manufacturer/importer	Use(s)	Chemical identity
P–16–0165	7/26/2016	10/24/2016	Dura Chemicals, Inc.	(S) Iron, 2-ethylhexanoate propionate complexes is a component in a metal organic product that will be used in paint and ink driers, UPR promoters, lube/grease additives, fuel additives, polymerization catalysts, specialty petrochemical catalysts, etc., the amount of the iron, 2-ethyhexanoate propionate complexes will be well under 1% in any final product.	(S) Iron, 2- ethylhexanoate propionate complexes.
P–16–0186	7/12/2016	10/10/2016	CBI	(G) Surfactant	(G) Sodium branched chain alkyl hydroxyl and branched chain alkenyl sulfonates.
P–16–0206	7/13/2016	10/11/2016	CBI	(G) Pigment wetting and dispersing additive.	(G) Formaldehyde ketone condensate polymer.
P–16–0313	7/5/2016	10/3/2016	Honeyol, Inc	(S) Use in production of resins raw material used in the production of resins.	(S) Tar acids (shale oil), c6–9 fraction, alkylphenols, low-boiling.
P–16–0358	7/20/2016	10/18/2016	CBI	(S) Intermediate for further polymer reaction.	(G) Alkyl phenol.
P–16–0414	7/1/2016	9/29/2016	CBI	(S) Polymerized pigment used in the manufacture of electronic inks.	(G) Dimethylsiloxane methyl methacrylate copolymer.
P–16–0427	7/8/2016	10/6/2016	CBI	(G) Adhesive	(G) Alkanedioic acid polymer with ethenylbenzene alky-2-alkenoate, alkanediol, .alpha. ????????????-hydro-.omega.-hydroxypoly[oxyalkyl-alkanediyl)], hydroxyalkyl-alkyl-alkenoate, and aromatic isocyanate.
P–16–0438	7/15/2016	10/13/2016	CBI	(S) Intermediate for pesticide inert	(S) 3-butenenitrile, 2-(acetyloxy).
P–16–0446	7/8/2016	10/6/2016	Allnex, USA, Inc	(S) Resin in architectural primer coatings.	(G) Fatty acids, reaction products with alkylamine, polymers with substituted carbomonocycle, substituted alkylamines, heteromonocycle and substituted alkanoate, lactates (salts).
P–16–0450	7/21/2016	10/19/2016	CBI	(G) Plasticizer	(S) 1,2,4-benzenetricarboxylic acid, 1,2,4-trinonyl ester.
P–16–0451	7/8/2016	10/6/2016	Evonik Corporation.	(G) Binder in coatings	(G) Siloxane binder.
P–16–0455	7/13/2016	10/11/2016	CBI	(S) Component of Infrared absorption material.	(G) Mixed metal oxide.

TABLE 1—PMNS RECEIVED FROM JULY 1, 2016 TO JULY 29, 2016—Continued

Case No.	Date received	Projected end date for EPA review	Manufacturer/ importer	Use(s)	Chemical identity
P–16–0456	7/7/2016	10/5/2016	Kemira Chemicals	(S) Flocculant used to treat mining tailings.	(S) 2-propenoic acid, calcium salt (2:1), polymer with 2-propenamide.
P–16–0457	7/7/2016	10/5/2016	Kemira Chemicals	(S) Flocculant used to treat mining tailings.	(S) Ethanaminium, n,n,n-trimethly-2-[(1-oxo-2-propen-1-yl)oxyl-, chloride (1:1), polymer with calcium 2-propenoate (1:2) and 2-propenamide.
P–16–0458	7/6/2016	10/4/2016	CBI	(G) Odor control agent	(G) Dialkyldimethyl ammonium salt.
P–16–0459	7/14/2016	10/12/2016	CBI	(G) Printing additive	(G) Carbomonocyclic dicarboxylic acid, polymer with alkanedioic acid, substituted heteropolycycle, substituted carbomonocycle, alkyl alkenoate, alkanedioic acid, alkoxylated substituted dicarbomonocycle, alkoxylated substituted dicarbomonocycle, alkenoic acid, oxo alkyl initiated.
P–16–0460	7/12/2016	10/10/2016	CBI	(G) Process aid	(G) Silane-treated aluminosilicate.
P–16–0461	7/12/2016	10/10/2016	CBI	(G) Process aid	(G) Silane-treated aluminosilicate.
P–16–0462	7/12/2016	10/10/2016	CBI	(G) Process aid	(G) Silane-treated aluminosilicate.
P–16–0463	7/12/2016	10/10/2016	CBI	(G) Process aid	(G) Silane-treated aluminosilicate.
P–16–0464	7/12/2016	10/10/2016	CBI	(G) Process aid	(G) Silane-treated aluminosilicate.
P–16–0465	7/11/2016	10/9/2016	CBI	(G) Surfactant	(G) Perfluoroalkyl ammonium chloride.
P–16–0466	7/11/2016	10/9/2016	CBI	(G) Additive open non-dispersive use.	(G) 2,5-furandione, telomer with ethenylbenzene and (alkylethyl)benzene, amides with polyethylene-polypropylene glycol aminoalkyl me ether, alkali salts.
P–16–0467	7/13/2016	10/11/2016	CBI	(S) Intermediate for a polyurethane catalyst.	(G) Propanenitrile, polyalkylpolyamine.
P–16–0468	7/14/2016	10/12/2016	Gelest	(S) Research	(S) Silsesquioxanes, 3,3,4,4,5,5,6,6,7,7,8,8,8-ridecafluorooctyl.
P–16–0468	7/14/2016	10/12/2016	Gelest	(S) The new substance will be used as a modifier for various polymeric coatings with applications in for example automotive fuel lines microelectronic housing coatings.	(S) Silsesquioxanes, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl.
P–16–0468	7/14/2016	10/12/2016	Gelest	(S) The new material is to be used as a modifier for polymeric systems to make specialty coatings for applications in automotive fuel lines and other parts, as well as coatings for microelectronic housing industrial and oil and gas equipment. the amount of the new substance is estimate to be about 20mg per square meter of a coating.	(S) Silsesquioxanes, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl.
P–16–0469	7/14/2016	10/12/2016	Gelest	(S) The new material is to be used as a modifier for polymeric systems to make specialty coatings for applications in automotive fuel lines and other parts, as well as coatings for microelectronic housing, industrial and oil and gas equipment. the amount of the new substance is estimate to be about 20mg per square meter of a coating.	(S) Silsesquioxanes, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl.
P–16–0469	7/14/2016	10/12/2016	Gelest	(S) Research	(S) Silsesquioxanes, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl.

TABLE 1—PMNS RECEIVED FROM JULY 1, 2016 TO JULY 29, 2016—Continued

Case No.	Date received	Projected end date for EPA review	Manufacturer/ importer	Use(s)	Chemical identity
P–16–0469	7/14/2016	10/12/2016	Gelest	(S) The new substance will be used as a modifier for various polymeric coatings with applications in, for example automotive fuel lines microelectronic housing coatings.	(S) Silsesquioxanes, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl.
P–16–0470	7/14/2016	10/12/2016	Firmenich, Inc.	(G) As part of a fragrance formula ...	(S) 2,7-nonadien-4-ol, 4,8-dimethyl-.
P–16–0477	7/27/2016	10/25/2016	Ethox Chemicals, LLC.	(G) Lubricant	(G) Polyalkylene oxide phosphate, oleyl ether.
P–16–0478	7/15/2016	10/13/2016	CBI	(S) Chemical intermediate	(G) Fatty acid amidoamine.
P–16–0478	7/15/2016	10/13/2016	CBI	(S) Additive for flotation products	(G) Fatty acid amidoamine.
P–16–0478	7/15/2016	10/13/2016	CBI	(S) Use in asphalt formulations adhesion promoter or emulsifier.	(G) Fatty acid amidoamine.
P–16–0479	7/15/2016	10/13/2016	CBI	(S) Chemical intermediate	(G) Fatty acid amidoamine.
P–16–0479	7/15/2016	10/13/2016	CBI	(S) Additive for flotation products	(G) Fatty acid amidoamine.
P–16–0479	7/15/2016	10/13/2016	CBI	(S) Use in asphalt formulations adhesion promoter or emulsifier.	(G) Fatty acid amidoamine.
P–16–0480	7/15/2016	10/13/2016	CBI	(S) Additive for flotation products	(G) Fatty acid amidoamine.
P–16–0480	7/15/2016	10/13/2016	CBI	(S) Chemical intermediate	(G) Fatty acid amidoamine.
P–16–0480	7/15/2016	10/13/2016	CBI	(S) Use in asphalt formulations adhesion promoter or emulsifier.	(G) Fatty acid amidoamine.
P–16–0481	7/15/2016	10/13/2016	CBI	(S) Use in asphalt formulations adhesion promoter or emulsifier.	(G) Fatty acid amidoamine.
P–16–0481	7/15/2016	10/13/2016	CBI	(S) Additive for flotation products	(G) Fatty acid amidoamine.
P–16–0481	7/15/2016	10/13/2016	CBI	(S) Chemical intermediate	(G) Fatty acid amidoamine.
P–16–0482	7/15/2016	10/13/2016	CBI	(S) Chemical intermediate	(G) Fatty acid amidoamine.
P–16–0482	7/15/2016	10/13/2016	CBI	(S) Use in asphalt formulations adhesion promoter or emulsifier.	(G) Fatty acid amidoamine.
P–16–0482	7/15/2016	10/13/2016	CBI	(S) Additive for flotation products	(G) Fatty acid amidoamine.
P–16–0483	7/18/2016	10/16/2016	CBI	(G) Plastic additive	(G) Inorganic acids, metal salts, compds. with modified heteroaromatics.
P–16–0484	7/18/2016	10/16/2016	CBI	(G) Chemical intermediate	(G) Inorganic acid, metal salt, compd. with substituted aromatic heterocycle.
P–16–0485	7/18/2016	10/16/2016	CBI	(G) NCS is a colorant component used in coatings open non-dispersive use.	(G) Butanedioic diester.
P–16–0486	7/18/2016	10/16/2016	CBI	(G) Isolated intermediate in the production of a refrigerant precursor.	(G) Polychloropropane.
P–16–0488	7/20/2016	10/18/2016	CBI	(G) Binder for fibrous materials	(G) Alkenoic acid, polymer with hydrolyzed acid anhydride, compds. with alkanolamine.
P–16–0492	7/27/2016	10/25/2016	CBI	(G) Polymeric dye carrier	(G) Polyester-amide polymer of 'isophthalic acid' with diamino-alkane, cyclohexane-dialcohol, alkanetriol, di-isocyanate and acrylic acid-ethylene co-polymer.
P–16–0493	7/27/2016	10/25/2016	CBI	(G) Paint	(G) Polyurethane/acrylic grafted co-polymer, dimethylaminoethanol salt.
P–16–0494	7/25/2016	10/23/2016	CBI	(G) Adhesive for electrical industry use.	(G) Carboxylated styrene butadiene polymer.
P–16–0497	7/26/2016	10/24/2016	CBI	(G) Prepolymer	(G) Urethane prepolymer.
P–16–0498	7/27/2016	10/25/2016	CBI	(G) Open non-dispersive	(G) Hydroxy acrylic polymer, lactates.
P–16–0501	7/29/2016	10/27/2016	Reagens, USA, Inc.	(S) PVC stabilizer	(S) Di(m-2,2',2"-nitrilotris(ethanol)-diperchlorato)dinatrium.

For the 20 NOCs received by EPA during this period, Table 2 provides the following information (to the extent that such information is not claimed as CBI): The EPA case number assigned to the NOC; the date the NOC was received by EPA; the projected date of commencement provided by the submitter in the NOC; and the chemical identity.

TABLE 2—NOCS RECEIVED FROM JULY 1, 2016 TO JULY 29, 2016

Case No.	Date received	Projected date of commencement	Chemical identity
J–16–0003	7/25/2016	7/1/2016	(S) Saccharomyces cerevisiae, modified.
P–11–0243	7/13/2016	3/12/2016	(G) Alkanedioic acid polymer with alkanediol and diisocyanatohexane.
P–12–0149	7/18/2016	7/29/2013	(G) Distillation bottoms from manufacture or brominated cycloalkanes.
P–12–0273	7/25/2016	6/23/2016	(S) Coconut oil, polymer with di-me malonate, pentaerythritol, phthalic anhydride and trimethylolpropane.
P–13–0162	7/6/2016	3/7/2014	(G) Substituted cyclopentadienyl silico aluminoxanes.
P–13–0595	7/13/2016	7/28/2015	(G) Oxirane, alkyl -, polymer with oxirane, hydrogen sulfate, alkyl ethers, alkali metal salts.
P–13–0884	7/7/2016	6/20/2016	(S) 1,3'-bipyridinium, 1'-[3-(dimethylamino)propyl]-6'-hydroxy-4'-methyl-2'-oxo-, inner salt.
P–14–0834	7/11/2016	7/8/2016	(S) Cyclohexane, 1,1'-methylenebis[4-isocyanato-, homopolymer, 2-butoxyethanol- and polyethylene glycol mono-me ether-blocked.
P–15–0393	7/13/2016	9/21/2015	(G) Alkanedioic acid, polymer with alkanediol .alpha.-hydro-.omega.-hydroxypoly[oxy(alkyl)] and alkyl aromatic diisocyanate.
P–15–0535	7/13/2016	7/11/2016	(G) Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, compds. with hydroxylamine-blocked polymethylenepolyphenylene isocyanate-polymeric diol.
P–15–0634	7/13/2016	6/27/2016	(S) 2-butanone, 4-(dodecylthio)-4-[2,6,6-trimethyl-1(or 2)-cyclohexen-1-yl]-.
P–16–0042.	7/6/2016	6/16/2016	(G) Polyammonium salt of a fatty acid.
P–16–0047	7/15/2016	6/15/2016	(G) Aromatic polyimide.
P–16–0047	7/15/2016	6/16/2016	(G) Aromatic polyimide.
P–16–0104	7/25/2016	7/18/2016	(S) 2-pyridinecarboxylic acid, 4,5-dichloro-6-(4-chloro-2-fluoro-3-methoxyphenyl).
P–16–0133	7/15/2016	6/19/2016	(S) 1,4-benzenedicarboxylic acid, polymer with 2-methyl-1,8-octanediamine and 1,9-nonanediamine, reaction products with benzoic acid.
P–16–0133	7/15/2016	6/20/2016	(S) 1,4-benzenedicarboxylic acid, polymer with 2-methyl-1,8-octanediamine and 1,9-nonanediamine, reaction products with benzoic acid.
P–16–0179	7/14/2016	7/1/2016	(G) Alkanoic acids, esters with alkanetriol.
P–16–0243	7/25/2016	7/19/2016	(S) Propanedioic acid, 1,3-diethyl ester polymer with 2,2-dimethyl-1,3-propanediol and hexahydro-1,3-isobenzofurandione.
P–16–0270	7/8/2016	7/5/2016	(G) Derivative of substituted acrylamides copolymer.

Authority: 15 U.S.C. 2601 *et seq.*

Dated: August 17, 2016.

Pamela S. Myrick,

Acting Information Management Division, Office of Pollution Prevention and Toxics.

[FR Doc. 2016–20303 Filed 8–23–16; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–9951–39–Region 10]

Issuance of National Pollutant Discharge Elimination System (NPDES) General Permit (GP) for Idaho Drinking Water Treatment Facilities

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of availability.

SUMMARY: The Director, Office of Water and Watersheds, Environmental Protection Agency (EPA) is publishing notice of availability of the final NPDES GP (IDG380000) to drinking water treatment facilities in Idaho. The GP authorizes discharges of treated wastewater from water treatment filtration processes and their delivery systems to waters of the United States within the State of Idaho. On April 25, 2016, EPA proposed the GP and there was a 30 day comment period. During the comment period, EPA received comments on the draft permit but no changes to the permit were necessary based on the comments received.

DATES: The issuance date of the GP is the date of publication of this notice. The GP will be effective on November 1, 2016.

ADDRESSES: The GP, Fact Sheet and Response to Comments may be found on the Region 10 Web site at *https://yosemite.epa.gov/r10/water.nsf/NPDES+Permits/Current+ID1319.* Copies of the GP and Response to Comments are available upon request. Written requests for copies of the documents may be submitted to EPA, Region 10, 1200 Sixth Avenue, Suite 900, OWW–191, Seattle, WA 98101.

Electronic requests may be emailed to: *washington.audrey@epa.gov* or *shum.kai@epa.gov.*

FOR FURTHER INFORMATION CONTACT: Kai Shum at (206) 553–0060, *shum.kai@epa.gov.*

SUPPLEMENTARY INFORMATION: EPA requested final certification under the Clean Water Act § 401 from the State of Idaho and Tribal governments. EPA received certification from the Idaho Department of Environmental Quality in a letter dated July 28, 2016, that the subject discharges comply with the applicable provisions of Sections 301, 302, 303, 306 and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

Executive Order 12866: The Office of Management and Budget has exempted this action from the review requirements of Executive Order 12866 pursuant to Section 6 of that order.

Regulatory Flexibility Act: Under the Regulatory Flexibility Act (RFA), 5 U.S.C. 601 *et seq.,* a Federal agency must prepare an initial regulatory flexibility analysis "for any proposed rule" for which the agency "is required by section 553 of the Administrative Procedure Act (APA), or any other law, to publish general notice of proposed rulemaking." The RFA exempts from this requirement any rule that the issuing agency certifies "will not, if promulgated, have a significant economic impact on a substantial number of small entities." EPA has concluded that NPDES general permits are permits, not rulemakings, under the APA and thus not subject to APA rulemaking requirements or the RFA. Notwithstanding that general permits are not subject to the RFA, EPA has determined that these general permits, as issued, will not have a significant economic impact on a substantial number of small entities.

Dated: August 16, 2016.

Daniel D. Opalski,

Director, Office of Water & Watersheds, Region 10.

[FR Doc. 2016–20322 Filed 8–23–16; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL DEPOSIT INSURANCE CORPORATION

Agency Information Collection Activities: Information Collection Revision; Comment Request (3064–0200)

AGENCY: Federal Deposit Insurance Corporation (FDIC).

ACTION: Notice and request for comment.

SUMMARY: The FDIC, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on the revision of an existing information collection, as required by the Paperwork Reduction Act of 1995. The FDIC is soliciting comment on the revision of the existing information collection entitled "Joint Standards for Assessing Diversity Policies and Practices" by adding a form to the information collection entitled "Diversity Self-Assessment Template for Entities Regulated by the FDIC."

DATES: Comments must be submitted on or before October 24, 2016.

ADDRESSES: Interested parties are invited to submit written comments to the FDIC by any of the following methods:

- *http://www.FDIC.gov/regulations/laws/federal/.*
- *Email: comments@fdic.gov* Include the name and number of the collection in the subject line of the message.
- *Mail:* Manny Cabeza (202.898.3767), Counsel MB–3105, Federal Deposit Insurance Corporation, 550 17th Street NW., Washington, DC 20429.
- *Hand Delivery:* Comments may be hand-delivered to the guard station at the rear of the 17th Street Building (located on F Street), on business days between 7:00 a.m. and 5:00 p.m.

All comments should refer to the relevant OMB control number. A copy of the comments may also be submitted to the OMB desk officer for the FDIC: Office of Information and Regulatory Affairs, Office of Management and Budget, New Executive Office Building, Washington, DC 20503.

FOR FURTHER INFORMATION CONTACT: Manny Cabeza, at the FDIC address above.

SUPPLEMENTARY INFORMATION: Under the PRA (44 U.S.C. 3501–3520), certain Federal agencies must obtain approval from OMB for each collection of information that they conduct or sponsor. "Collection of information" is defined in 44 U.S.C. 3502(3) (and 5 CFR 1320.3(c) of the PRA implementing regulations) to include agency requests or requirements that members of the public submit reports, keep records, or provide information to a third party. The PRA (44 U.S.C. 3506(c)(2)(A)) directs these Federal agencies to provide a 60-day notice in the **Federal Register** concerning each proposed collection of information before submitting the collection to OMB for approval. To comply with this requirement, the FDIC is publishing this notice of a revision to the following currently-approved collection of information:

Title: Joint Standards for Assessing Diversity Policies and Practices.

OMB Number: 3064–0200.

Affected Public: Insured financial institutions supervised by the FDIC.

Annual Number of Respondents: 398.

Frequency of Response: Annual.

Average Response Time per Respondent: 8 hours.

Estimated Total Annual Buren Hours: 3,184 hours.

General Description: This voluntary information collection applies to entities regulated by the FDIC for purposes of assessing their diversity policies and practices as described in the final Interagency Policy Statement Establishing Joint Standards for Assessing the Diversity Policies and Practices of Entities Regulated by the Agencies.[1] This revision to the previously approved collection adds a form entitled *Diversity Self-Assessment Template for Entities Regulated by the FDIC* intended to facilitate responders' self-assessment process. The FDIC estimates that the use of the template will result in a reduction in the average response time per respondent from 12 hours to 8 hours with a corresponding reduction in the estimated total annual burden hours for this collection of information from 4,778 hours to 3,184 hours. The *Diversity Self-Assessment Template for Entities Regulated by the FDIC* can be viewed at *www.fdic.gov/about/diversity/dsa_template.docx.* This revision to the previously approved collection of information: (1) Asks for general information about a respondent; (2) includes a checklist of the standards set forth in the Policy Statement; (3) seeks additional diversity data; and (4) provides an opportunity for a respondent to give other information regarding or comment on the self-assessment of its diversity policies and practices.

The FDIC may use the information submitted by the entities it regulates to monitor progress and trends in the financial services industry with regard to diversity and inclusion in employment and contracting activities and to identify and highlight those policies and practices that have been successful. The FDIC will continue to reach out to the regulated entities and other interested parties to discuss diversity and inclusion in the financial services industry and share leading practices. The FDIC may also publish information disclosed by the entity, such as any identified leading practices, in any form that does not identify a particular institution or individual or disclose confidential business information.

Request for Comments: Comments are invited on: (a) Whether the collections of information are necessary for the proper performance of the FDIC's functions, including whether the information has practical utility; (b) the accuracy of the estimates of the burden of the collections of information, including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collections of information on respondents, including through the use of automated collection techniques or other forms of information technology. All comments will become a matter of public record.

Dated at Washington, DC, this 19th day of August 2016.

Federal Deposit Insurance Corporation.

Robert E. Feldman,

Executive Secretary.

[FR Doc. 2016–20244 Filed 8–23–16; 8:45 am]

BILLING CODE 6714–01–P

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[1] 80 FR 33016 (June 10, 2015).

FEDERAL MARITIME COMMISSION

[Petition No. P3–16]

Petition of APL Co. PTE Ltd; for An Exemption From Commission Regulations; Notice of Filing and Request for Comments

This is to provide notice of filing and to invite comments on or before September 1, 2016, regarding the Petition described below.

APL Co. Pte Ltd on behalf of itself and American President Lines, Ltd. (Petitioner), has petitioned the Commission pursuant to 46 CFR 502.76 of the Commission's Rules of Practice and Procedure, for an exemption from the Commission's rules requiring individual service contract amendments, 46 CFR. 530.10, and the rule prohibiting duplicative tariffs, 46 CFR 520.7(a)(4). Specifically, Petitioner explains that "APL is currently majority owned by CMA CGM S.A. ("CMA CGM") a vessel operating common carrier headquartered in Marseille, France. On or about September 1, 2016, APL will become delisted from the Singaporean stock exchange and be 100% owned by CMA CGM. At that time, CMA CGM will begin to consolidate certain operations under its various brands worldwide." In particular, CMA CGM will transfer the slot allocations of its wholly owned subsidiary ANL Singapore Pte. Ltd. ("ANL") to APL effective October 1, 2016.

Petitioner requests that in lieu of publishing amendments to each of approximately 600 service contracts effected by the transfer of ANL's transpacific business, "the Commission permit APL to send a universal notice to the Commission and to each of the service contract parties." In addition, because existing ANL tariffs "will be taken over by APL and will be renumbered and republished under APL's organization number," Petitioners also seek a waiver to permit insertion of notices in existing ANL and new APL tariffs.

The Petition in its entirety is posted on the Commission's Web site at *http://www.fmc.gov/P3-16.* Comments filed in response to this Petition also will be posted on the Commission's Web site at this location.

In order for the Commission to make a thorough evaluation of the Petition, interested persons are requested to submit comments in reply to the Petition no later than September 1, 2016. Commenters must send an original and 5 copies to the Secretary, Federal Maritime Commission, 800 North Capitol Street NW., Washington, DC 20573-0001, and be served on Eric R. Swett, VP & General Counsel, Americas, APL Limited, 16220 N. Scottsdale Rd., Scottsdale, AZ 85254-1781. A text-searchable PDF copy of the comment must also be sent as an email attachment to *Secretary@fmc.gov,* and include in the subject line: "P3-16 (Commenter/Company Name)." Replies containing confidential information should not be submitted by email.

Rachel E. Dickon,

Assistant Secretary.

[FR Doc. 2016-20220 Filed 8-23-16; 8:45 am]

BILLING CODE 6731-AA-P

FEDERAL RESERVE SYSTEM

Change in Bank Control Notices; Acquisitions of Shares of a Bank or Bank Holding Company

The notificants listed below have applied under the Change in Bank Control Act (12 U.S.C. 1817(j)) and § 225.41 of the Board's Regulation Y (12 CFR 225.41) to acquire shares of a bank or bank holding company. The factors that are considered in acting on the notices are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The notices are available for immediate inspection at the Federal Reserve Bank indicated. The notices also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank indicated for that notice or to the offices of the Board of Governors. Comments must be received not later than September 6, 2016.

A. Federal Reserve Bank of San Francisco (Gerald C. Tsai, Director, Applications and Enforcement) 101 Market Street, San Francisco, California 94105-1579:

1. *First Financial Northwest Foundation and the First Financial Northwest ESOT, both of Renton, Washington;* to retain and acquire additional voting shares of First Financial Northwest, Inc., and thereby indirectly acquire shares of First Financial Northwest Bank, both of Renton, Washington.

2. *The Living Trust for the Benefit of Stephanie M. Smith, Helen Langer Smith, and Cynthia L. Smith; Kitsap, Washington,* as Trustees for the Living Trust for the Benefit of Stephanie M. Smith; and Michael K. Pigors, Memphis, Tennessee, to retain additional shares of Olympic Bancorp, Inc., and thereby indirectly retain voting shares of Kitsap Bank, both of Port Orchard, Washington.

B. Federal Reserve Bank of Chicago (Colette A. Fried, Assistant Vice President) 230 South LaSalle Street, Chicago, Illinois 60690-1414:

1. *Arthur C. Johnson as trustee of the Arthur C. Johnson Bank Stock Trust; Ada, Michigan; the Arthur C. Johnson Bank Stock Trust, Ada, Michigan; Lynnea K. Gery, LaGrange, Illinois,* as trustee and Arthur C. Johnson as special trustee of the Charles and Lois Welling Family Trust, Patricia A. Johnson as trustee of the Patricia A. Johnson Bank Stock Trust, the Patricia A. Johnson Bank Stock Trust, all of Ada, Michigan; Erik T. Johnson, Rockford, Michigan; Hilary L. Ciesielski, Canton, Michigan; Bonnie K. Miller, individually, and as trustee of the Bonnie K. Miller Bank Stock Trust, the Bonnie K. Miller Bank Stock Trust, Legacy Trust as trustee of the Arthur C. Johnson Irrevocable Trust, the Arthur C. Johnson Irrevocable Trust, Legacy Trust as trustee of the Patricia A. Johnson Irrevocable Trust, and the Patricia A. Johnson Irrevocable Trust, all of Grand Rapids, Michigan; the Charles and Lois Welling Family Trust, Charles J. Welling and Lois M. Welling as trustees of the Charles and Lois Welling Bank Stock Trust, the Charles and Lois Welling Bank Stock Trust, all of Hutchinson Island, Florida; and Patlin Leasing Company, as a group acting in concert to retain voting shares of United Community Financial Corporation, and indirectly shares of United Bank of Michigan, both of Grand Rapids, Michigan.

Board of Governors of the Federal Reserve System, August 18, 2016.

Margaret M. Shanks,

Deputy Secretary of the Board.

[FR Doc. 2016-20201 Filed 8-23-16; 8:45 am]

BILLING CODE 6210-01-P

FEDERAL RESERVE SYSTEM

Formations of, Acquisitions by, and Mergers of Savings and Loan Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Home Owners' Loan Act (12 U.S.C. 1461 *et seq.*) (HOLA), Regulation LL (12 CFR part 238), and Regulation MM (12 CFR part 239), and all other applicable statutes and regulations to become a savings and loan holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a savings association and nonbanking companies owned by the savings and loan holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The application also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in the HOLA (12 U.S.C. 1467a(e)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the nonbanking company complies with the standards in section 10(c)(4)(B) of the HOLA (12 U.S.C. 1467a(c)(4)(B)). Unless otherwise noted, nonbanking activities will be conducted throughout the United States.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than September 18, 2016.

A. Federal Reserve Bank of Atlanta (Chapelle Davis, Assistant Vice President) 1000 Peachtree Street NE., Atlanta, Georgia 30309. Comments can also be sent electronically to *Applications.Comments@atl.frb.org*:

1. *Sunshine Bancorp, Inc., Plant City, Florida ("Sunshine");* to become a savings and loan holding company. Sunshine currently is a savings and loan holding company; Sunshine proposes to become a bank holding company for a moment in time by merging with FNB Bancorp Inc., Orlando, Florida and acquire its subsidiary bank, Florida Bank of Commerce, Orlando Florida, ("FB Bank"). Sunshine also has applied to retain its savings association, Sunshine Bank, Plant City, Florida. After the acquisition, Sunshine proposes to merge FB Bank with Sunshine Bank, with Sunshine Bank as the surviving entity, and become a savings and loan holding company.

Board of Governors of the Federal Reserve System, August 18, 2016.

Margaret M. Shanks,

Deputy Secretary of the Board.

[FR Doc. 2016–20202 Filed 8–23–16; 8:45 am]

BILLING CODE 6210–01–P

FEDERAL TRADE COMMISSION

Agency Information Collection Activities; Proposed Collection; Comment Request

AGENCY: Federal Trade Commission (FTC or Commission).

ACTION: Notice.

SUMMARY: The information collection requirements described below will be submitted to the Office of Management and Budget (OMB) for review, as required by the Paperwork Reduction Act (PRA). The FTC seeks public comments on its proposal to extend, for three years, the current PRA clearance for information collection requirements contained in its Consumer Product Warranty Rule. That clearance expires on December 31, 2016.

DATES: Comments must be received on or before October 24, 2016.

ADDRESSES: Interested parties may file a comment online or on paper by following the instructions in the Request for Comments part of the **SUPPLEMENTARY INFORMATION** section below. Write "Warranty Rules: Paperwork Comment, FTC File No. P044403" on your comment, and file your comment online at *https://ftcpublic.commentworks.com/ftc/consumerwarrantypra* by following the instructions on the web-based form. If you prefer to file your comment on paper, mail or deliver your comment to the following address: Federal Trade Commission, Office of the Secretary, 600 Pennsylvania Avenue NW., Suite CC–5610 (Annex J), Washington, DC 20580, or deliver your comment to the following address: Federal Trade Commission, Office of the Secretary, Constitution Center, 400 7th Street SW., 5th Floor, Suite 5610 (Annex J), Washington, DC 20024.

FOR FURTHER INFORMATION CONTACT: Requests for copies of the collection of information and supporting documentation should be addressed to Gary Ivens, Attorney, Division of Marketing Practices, Bureau of Consumer Protection, Federal Trade Commission, 600 Pennsylvania Avenue NW., CC–8528, Washington, DC 20580, (202) 326–2330.

SUPPLEMENTARY INFORMATION:

Proposed Information Collection Activities

Under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501–3520, federal agencies must get OMB approval for each collection of information they conduct, sponsor, or require. "Collection of information" means agency requests or requirements to submit reports, keep records, or provide information to a third party. 44 U.S.C. 3502(3); 5 CFR 1320.3(c). As required by section 3506(c)(2)(A) of the PRA, the FTC is providing this opportunity for public comment before requesting that OMB extend the existing PRA clearance for the information collection requirements associated with the Commission's Rule Concerning Disclosure of Written Consumer Product Warranty Terms and Conditions (the Consumer Product Warranty Rule or Warranty Rule), 16 CFR part 701 (OMB Control Number 3084–0111).

The FTC invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (2) the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on those who are to respond. All comments must be received on or before October 24, 2016.

The Warranty Rule is one of three rules [1] that the FTC implemented pursuant to requirements of the Magnuson-Moss Warranty Act, 15 U.S.C. 2301 *et seq.* (Warranty Act or Act).[2] The Warranty Rule specifies the information that must appear in a written warranty on a consumer product [3] costing more than $15. The Rule tracks section 102(a) of the Warranty Act,[4] specifying information that must appear in the written warranty and, for certain disclosures, mandates the exact language that must be used.[5] Neither the Warranty Rule nor the Act requires that a manufacturer or retailer warrant a consumer product in writing, but if they choose to do so, the warranty must comply with the Rule.

Warranty Rule Burden Statement

Total annual hours burden: 140,280 hours.

In its 2013 submission to OMB, the FTC estimated that the information collection burden of including the disclosures required by the Warranty Rule was 116,128 hours per year. Although the Rule's information collection requirements have not changed, this estimate slightly increases the number of manufacturers subject to the Rule based on recent Census data. Further, because most warrantors would continue to disclose this information even if there were no statute or rule requiring them to do so, staff's estimates likely overstate the PRA-related burden attributable to the Rule. Moreover, the Warranty Rule has been in effect since 1976, and warrantors have long since modified their warranties to include the information the Rule requires.

Based on conversations with various warrantors' representatives over the years, staff has concluded that eight hours per year is a reasonable estimate of warrantors' PRA-related burden attributable to the Warranty Rule.[6] This estimate takes into account ensuring that new warranties and changes to existing warranties comply with the Rule. Based on recent Census data, staff now estimates that there are 17,535 manufacturers covered by the Rule.[7] This results in an annual burden estimate of approximately 140,280 hours (17,535 manufacturers × 8 hours of burden per year).

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[1] The other two rules relate to the pre-sale availability of warranty terms and minimum standards for informal dispute settlement mechanisms that are incorporated into a written warranty.

[2] 40 FR 60168 (Dec. 31, 1975).

[3] The definition of *consumer product* excludes products purchased solely for commercial or industrial use. 16 CFR 701.1(b).

[4] 15 U.S.C. 2302(a).

[5] 40 FR 60168, 60169–60170.

[6] FTC staff has previously contacted two manufacturing associations—the Association of Home Appliance Manufacturers and the National Association of Manufacturers—and we have not located additional data that further clarifies this figure.

Total annual labor costs: $19,011,798.

Labor costs are derived by applying appropriate hourly cost figures to the burden hours described above. The work required to comply with the Warranty Rule—ensuring that new warranties and changes to existing warranties comply with the Rule—requires a mix of legal analysis (50%), legal support (paralegals) (25%) and clerical help (25%). Staff estimates that half of the total burden hours (70,140 hours) requires legal analysis at an average hourly wage of $250 for legal professionals,[8] resulting in a labor cost of $17,535,000. Assuming that 25% of the total burden hours requires legal support at the average hourly wage of $25.19, and that the remaining 25% requires clerical work at an average hourly wage of $16.92; the resulting labor cost is approximately $1,154,893 ($883,413 + $593,384). Thus, the total annual labor cost is approximately $19,011,797 ($17,535,000 for legal professionals + $883,413 for legal support + $593,384 for clerical workers).

Total annual capital or other non-labor costs: $0.

The Rule imposes no appreciable current capital or start-up costs. As stated above, warrantors have already modified their warranties to include the information the Rule requires. Rule compliance does not require the use of any capital goods, other than ordinary office equipment, which providers would already have available for general business use.

Request for Comments

You can file a comment online or on paper. Write "Warranty Rules: Paperwork Comment, FTC File No. P044403" on your comment. Your comment—including your name and your state—will be placed on the public record of this proceeding, including, to the extent practicable, on the public Commission Web site, at *http://www.ftc.gov/os/publiccomments.shtm.* As a matter of discretion, the Commission tries to remove individuals' home contact information from comments before placing them on the Commission Web site.

Because your comment will be made public, you are solely responsible for making sure that your comment does not include any sensitive personal information, like anyone's Social Security number, date of birth, driver's license number or other state identification number or foreign country equivalent, passport number, financial account number, or credit or debit card number. You are also solely responsible for making sure that your comment does not include any sensitive health information, like medical records or other individually identifiable health information. In addition, do not include any "[t]rade secret or any commercial or financial information which is . . . privileged or confidential," as discussed in section 6(f) of the FTC Act, 15 U.S.C. 46(f), and FTC Rule 4.10(a)(2), 16 CFR 4.10(a)(2). In particular, do not include competitively sensitive information such as costs, sales statistics, inventories, formulas, patterns, devices, manufacturing processes, or customer names.

If you want the Commission to give your comment confidential treatment, you must file it in paper form, with a request for confidential treatment, and you have to follow the procedure explained in FTC Rule 4.9(c), 16 CFR 4.9(c). Your comment will be kept confidential only if the FTC General Counsel, in his or her sole discretion, grants your request in accordance with the law and the public interest.

Postal mail addressed to the Commission is subject to delay due to heightened security screening. As a result, the Commission encourages you to submit your comments online. To make sure that the Commission considers your online comment, you must file it at *https://ftcpublic.commentworks.com/ftc/consumerwarrantypra,* by following the instructions on the web-based form. If this Notice appears at *http://www.regulations.gov,* you also may file a comment through that Web site.

If you file your comment on paper, write "Warranty Rules: Paperwork Comment, FTC File No. P044403" on your comment and on the envelope, and mail or deliver it to the following address: Federal Trade Commission, Office of the Secretary, Room H–113 (Annex J), 600 Pennsylvania Avenue NW., Washington, DC 20580. If possible, submit your paper comment to the Commission by courier or overnight service.

Visit the Commission Web site at *http://www.ftc.gov* to read this Notice. The FTC Act and other laws that the Commission administers permit the collection of public comments to consider and use in this proceeding as appropriate. The Commission will consider all timely and responsive public comments that it receives on or before October 24, 2016. You can find more information, including routine uses permitted by the Privacy Act, in the Commission's privacy policy, at *http://www.ftc.gov/ftc/privacy.htm.*

David C. Shonka,
Principal Deputy General Counsel.

[FR Doc. 2016–20356 Filed 8–23–16; 8:45 am]

BILLING CODE 6750–01–P

GENERAL SERVICES ADMINISTRATION

[OMB Control No. 3090–00XX; Docket No. 2016–0001; Sequence 11]

Information Collection; Alliant2 Greenhouse Gas Disclosure

AGENCY: Federal Acquisition Service (FAS), General Services Administration (GSA).

ACTION: Notice of request for comments regarding a new request for an OMB clearance.

SUMMARY: Under the provisions of the Paperwork Reduction Act, the Regulatory Secretariat Division will be submitting to the Office of Management and Budget (OMB) a request to review and approve a new information collection requirement regarding OMB Control No: 3090–00XX; Alliant2 Greenhouse Gas Disclosure.

DATES: Submit comments on or before October 24, 2016.

ADDRESSES: Submit comments identified by Information Collection 3090–00xx; Alliant2 Greenhouse Gas Disclosure by any of the following methods:

- Regulations.gov: *http://www.regulations.gov.* Submit comments via the Federal eRulemaking portal by searching for "Information Collection 3090–00xx; Alliant2 Greenhouse Gas reporting". Select the link "Submit a Comment" that corresponds with "Information Collection 3090–00xx; Alliant2 Greenhouse Gas Disclosure". Follow the instructions provided at the "Submit a Comment" screen. Please include your name, company name (if any), and "Information Collection 3090–00xx; Alliant2 Greenhouse Gas Disclosure" on your attached document.
- Mail: General Services Administration, U.S. General Services

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[7] Because some manufacturers likely make products that are not priced above $15 or not intended for household use—and thus would not be subject to the Rule—this figure is likely an overstatement.

[8] Staff has derived an hourly wage rate for legal professionals based upon industry knowledge. The wage rates for legal support workers and for clerical support used in this Notice are based on recent data from the Bureau of Labor Statistics National Compensation Survey.

Administration, Regulatory Secretariat Division (MVCB), 1800 F Street NW., Washington, DC 20405. ATTN: Ms. Flowers/IC 3090–00XX, Alliant2 Greenhouse Gas Disclosure.

Instructions: Please submit comments only and cite Information Collection 3090–00XX; Alliant2 Greenhouse Gas Disclosure, in all correspondence related to this collection. Comments received generally will be posted without change to *http://www.regulations.gov,* including any personal and/or business confidential information provided. To confirm receipt of your comment(s), please check *www.regulations.gov,* approximately two to three days after submission to verify posting (except allow 30 days for posting of comments submitted by mail).

FOR FURTHER INFORMATION CONTACT: Dana Arnold, Director, Federal Acquisition Service Office of Acquisition Management, Special Programs Branch at telephone 703–605–0534 or via email to *dana.arnold@gsa.gov.*

SUPPLEMENTARY INFORMATION:

A. Purpose

President Obama has made Greenhouse Gas (GHG) emissions reduction nationwide and in the Federal community a priority. The President's Executive Order 13693, *Planning for Federal Sustainability in the Next Decade,* published in the **Federal Register** at 80 FR 15871, on March 25, 2015], requires the seven largest procuring agencies to implement procurements that take into consideration contractor GHG emissions and GHG management practices.

GSA has selected the Alliant2 Government-wide Acquisition Contract (GWAC) acquisition for inclusion of contractor GHG emissions disclosure requirements. Alliant, GSA's premier enterprise GWAC, provides flexible access to customized IT solutions from a large, diverse pool of industry partners. Alliant2 offers both large and small contractors. It is GSA's intent to require the large (unrestricted) Alliant2 contractors to inventory and publicly disclose their operational GHG emissions, set targets for reducing those emissions, and disclose progress toward meeting their targets. Of the current Alliant2 contractors, approximately 40 percent already publicly disclose their GHG emissions in response to requests from their non-government customers, investors, insurers, and corporate sustainability policies.

Public disclosure of GHG emissions and GHG reduction goals or targets has become standard practice in many industries, and companies are increasingly asking their own suppliers about their GHG management practices. More than 4,000 companies provided public disclosure through third-party organization CDP (formerly the Carbon Disclosure Project) in 2015. Performing a GHG inventory provides insight into operations and opportunities for energy and operational savings that can result in both environmental and financial benefits.

The Allliant2 GHG disclosure requirement will require the unrestricted (large and medium-sized) Alliant2 contractors to inventory, and publicly disclose their operational GHG emissions, set targets for reducing those emissions, and report progress toward meeting their targets. This will be an annual requirement.

B. Annual Reporting Burden

Respondents: 60.

Responses per Respondent: 1.

Total Annual Responses: 60.

Hours per Response: 80.

Total Burden Hours: 4800.

C. Public Comments

Public comments are particularly invited on: Whether this collection of information is necessary, whether it will have practical utility; whether our estimate of the public burden of this collection of information is accurate, and based on valid assumptions and methodology; ways to enhance the quality, utility, and clarity of the information to be collected; and ways in which we can minimize the burden of the collection of information on those who are to respond, through the use of appropriate technological collection techniques or other forms of information technology.

Obtaining Copies of Proposals: Requesters may obtain a copy of the information collection documents from the General Services Administration, Regulatory Secretariat Division (MVCB), 1800 F Street NW., Washington, DC 20405, telephone 202–501–4755. Please cite OMB Control No. 3090–00XX, Alliant2 Greenhouse Gas Disclosure, in all correspondence.

Dated: August 18, 2016.

David A. Shive,

Chief Information Officer.

[FR Doc. 2016–20314 Filed 8–23–16; 8:45 am]

BILLING CODE 6820–34–P

GENERAL SERVICES ADMINISTRATION

[Notice-ISP–2016–02; Docket 2016–0002; Sequence 22]

Privacy Act of 1974; Notice of an Updated System of Records of Records

AGENCY: General Services Administration (GSA).

ACTION: Notice; New system.

SUMMARY: GSA proposes a new system of records subject to the Privacy Act of 1974, as amended, 5 U.S.C. 552a.

DATES: *Effective:* September 23, 2016.

ADDRESSES: GSA Privacy Act Officer (ISP), General Services Administration, 1800 F Street NW., Washington, DC 20405.

FOR FURTHER INFORMATION CONTACT: Call or email the GSA Privacy Act Officer: Telephone 571–388–6570; email *gsa.privacyact@gsa.gov.*

SUPPLEMENTARY INFORMATION: GSA proposes to establish a new system of records subject to the Privacy Act of 1974, 5 U.S.C. 552a. The system is a citizen-centric platform for delivering government services through a centralized single sign-on platform. The platform will leverage personal information to provide identity proofing to partner agencies, as well as data and resources associated with the user's account. Based on a successful user login and identity proofing, the partner agency will grant access to the user.

In order to facilitate access, information must be collected to authenticate an individual's identity at the requisite level of assurance for the purpose of obtaining a credential or electronically authorizing access to an agency application or service. Identity proofing is the process by which an identity service provider collects and verifies personally identifiable information (PII) about an individual for the purpose of issuing credentials to that individual.

Third-party identity service providers used by *Login.gov* use a variety of verification techniques. Users will be authenticated and proofed at the level required by the partner agency for accessing specific services and records. When a user attempts to access an agency service or record, the individual will be directed to *Login.gov.* The information requested by the system and asserted back to the agency will be only what is necessary to establish Level of Access (LOA)1 or LOA3 as appropriate. For access to services or records that require LOA1, the user will be asked for email, password, and phone number.

For access to services or records that require LOA3, the user will be asked for PII that will be used for identity proofing, and then maintained in the system. Attributes requested for the proofing process are full name, date of birth, address, phone number, and social security number (SSN). The identity proofer will also ask the user credit and financial related questions. *Login.gov* does not have access to or retain the commercial identity verification information, questions asked of a user or the responses provided thereto.

Once proofed, the attribute bundle will be given a meaningless, but unique identifier number (MBUN) to identify the user in the system. The MBUN and attribute bundle will be asserted to the partner agency. The partner agency is granted access to user information only when the user logs in or specifically gives permission to transmit their information. The information in the system is contributed voluntarily by the user and cannot be accessed by the government without explicit consent of the user, except as provided in this notice.

Information is not shared between government agencies, except when the user gives explicit consent to share his or her information, except as provided in this notice.

Pranjali Desai,

Director, Office of Information Management, General Services Administration.

GSA/GOVT–10

SYSTEM NAME:

Login.gov.

SYSTEM LOCATION:

The system is maintained for GSA under contract. Contact the System Manager for additional information.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Anyone is able to create an account.

CATEGORIES OF RECORDS IN THE SYSTEM:

Records may include, but are not limited to: Biographical data such as name, address, email, password, phone number, birth date, social security number. Use of the system, and contribution of personal information, is completely voluntary.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

E-Government Act of 2002 (P.L. 107–347, 44 U.S.C. 3501 note)

PURPOSES:

To enable users to control how government interacts with them and their personal information, and to aid and assist users in interacting with the government. Users interacting with local, state, or federal agency developed applications may be asked to authorize the application to access system resources, such as their personal profile information. If a user authorizes use of his or her information, the agency application will be given programmatic access to the user's account resources. Profile, usage, and system information may be accessed by system managers, technical support and designated analysts in the course of their official duties.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Information from this system also may be disclosed as a routine use:

a. In any legal proceeding, where pertinent, to which GSA, a GSA employee, or the United States is a party before a court or administrative body.

b. To a Federal, State, local, or foreign agency responsible for investigating, prosecuting, enforcing, or carrying out a statute, rule, regulation, or order when GSA becomes aware of a violation or potential violation of civil or criminal law or regulation.

c. To a Member of Congress or his or her staff on behalf of and at the request of the individual who is the subject of the record.

d. To the Office of Personnel Management (OPM), the Office of Management and Budget (OMB), and the Government Accountability Office (GAO) in accordance their responsibilities for evaluating Federal programs.

e. To an expert, consultant, or contractor of GSA in the performance of a Federal duty to which the information is relevant.

f. To the National Archives and Records Administration (NARA) for records management purposes.

g. To a Federal agency in connection with the hiring or retention of an employee; the issuance of a security clearance; the reporting of an investigation; the letting of a contract; or the issuance of a grant, license, or other benefit to the extent that the information is relevant and necessary to a decision.

h. To appropriate agencies, entities, and persons when (1) the Agency suspects or has confirmed that the security or confidentiality of information in the system of records has been compromised; (2) The Agency has determined that as a result of the suspected or confirmed compromise there is a risk of harm to economic or property interests, identity theft or fraud, or harm to the security or integrity of this system or other systems or programs (whether maintained by GSA or another agency or entity) that rely upon the compromised information; and (3) the disclosure made to such agencies, entities, and persons is reasonably necessary to assist in connection with GSA's efforts to respond to the suspected or confirmed compromise and prevent, minimize, or remedy such harm.

i. To federal, state, or local government agencies or entities for purposes of complying with any legally authorized order or request of such an entity that is made in carrying out the entity's official responsibilities.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

All records are stored electronically in a database. Personally Identifiable Information (PII) is encrypted.

RETRIEVABILITY:

Records are retrieved using an authorization protocol. A user of the system grants explicit authorization to an application or government agency to access his or her profile.

SAFEGUARDS:

Access to the database is maintained behind a firewall certified in accordance with National Institute of Standards and Technology standards and information in the database is encrypted.

Records access is limited to authorized individuals and protected with two-factor authentication, and databases are behind a firewall. PII is encrypted at rest, and all transmissions of any information over external networks are encrypted. All passwords, encryption algorithms and firewalls are compliant with National Institute of Standards and Technology standards.

RETENTION AND DISPOSAL:

System records are retained and disposed of according to GSA records maintenance and disposition schedules and the requirements of the National Archives and Records Administration. The initial implementation of this has a limited scope of users. The option for users to delete their own information will be functional in a future version of the application. Physical records are disposed of by cross-cut shredding or burning as scheduled in the handbook, GSA Records Maintenance and Disposition System (CIO P. 1820.1).

SYSTEM MANAGER AND ADDRESS:

Director, *Login.gov*, General Services Administration, 1800 F Street NW., Washington, DC 20405; ATTN: *https://www.login.gov.*

NOTIFICATION PROCEDURE:

Individuals or users maintain their own information. Inquires can be made via the Web site at *https://login.gov/* or at the above address under 'System Manager and Address'.

RECORD ACCESS PROCEDURES:

Individuals or users wishing to access their own records may do so by password or by contacting the system administrator at the above address.

CONTESTING RECORD PROCEDURES:

Individuals or users of the system may amend their own records online.

RECORD SOURCE CATEGORIES:

The sources for information in the system are the individuals (or system users) for whom the records are maintained, and third-party applications which the user has authorized to contribute information to his or her account.

[FR Doc. 2016–20191 Filed 8–23–16; 8:45 am]

BILLING CODE 6820–34–P

GENERAL SERVICES ADMINISTRATION

[OMB Control No. 3090–XXXX; Docket 2016–0001; Sequence 9]

Submission for OMB Review; Nondiscrimination in Federal Financial Assistance Programs, GSA Form 3702

AGENCY: Office of Civil Rights, General Services Administration (GSA).

ACTION: Notice of request for comments regarding a new request for an OMB clearance.

SUMMARY: Under the provisions of the Paperwork Reduction Act, the Regulatory Secretariat Division will be submitting to the Office of Management and Budget (OMB) a request to review and approve a new information collection requirement regarding OMB Control No: 3090–XXXX; Nondiscrimination in Federal Financial Assistance Programs, GSA 3702. This information is needed to facilitate nondiscrimination in GSA's Federal Financial Assistance Programs, consistent with Federal civil rights laws and regulations that apply to recipients of Federal financial assistance. A notice was published in the **Federal Register** at 81 FR 36541 on June 7, 2016. No comments were received.

DATES: Submit comments on or before: September 23, 2016.

FOR FURTHER INFORMATION CONTACT: Evelyn Britton, Director, External Programs Division, Office of Civil Rights, at telephone 202–603–1645 or via email to *evelyn.britton@gsa.gov.*

ADDRESSES: Submit comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Office of Information and Regulatory Affairs of OMB, Attention: Desk Officer for GSA, Room 10236, NEOB, Washington, DC 20503. Additionally submit a copy to GSA by any of the following methods:

- *Regulations.gov: http://www.regulations.gov.* Submit comments via the Federal eRulemaking portal by searching the OMB control number. Select the link "Submit a Comment" that corresponds with "Information Collection 3090–XXXX, Nondiscrimination in Federal Financial Assistance Programs, GSA 3702". Follow the instructions provided at the "Submit a Comment" screen. Please include your name, company name (if any), and "Information Collection 3090–XXXX, Nondiscrimination in Federal Financial Assistance Programs, GSA 3702" on your attached document.
- *Mail:* General Services Administration, Regulatory Secretariat Division (MVCB), 1800 F Street NW., Washington, DC 20405. ATTN: Ms. Flowers/IC 3090–0228, Nondiscrimination in Federal Financial Assistance Programs, GSA 3702.

Instructions: Please submit comments only and cite Information Collection 3090–XXXX, Nondiscrimination in Federal Financial Assistance Programs, GSA 3702, in all correspondence related to this collection. Comments received generally will be posted without change to *http://www.regulations.gov,* including any personal and/or business confidential information provided. To confirm receipt of your comment(s), please check *www.regulations.gov,* approximately two to three days after submission to verify posting (except allow 30 days for posting of comments submitted by mail).

SUPPLEMENTARY INFORMATION:

A. Purpose

GSA has mission responsibilities related to monitoring and enforcing compliance with Federal civil rights laws and regulations that apply to Federal financial assistance programs administered by GSA. Specifically, those laws provide that no person on the ground of race, color, national origin, disability, sex or age shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program in connection with which Federal financial assistance is extended under laws administered in whole, or in part, by GSA.

These mission responsibilities generate the requirement to request and obtain certain data from recipients of Federal surplus property for the purpose of determining compliance, such as the number of individuals, based on race and ethnic origin, of the recipient's eligible and actual serviced population; race and national origin of those denied participation in the recipient's program(s); non-English languages encountered by the recipient's program(s) and how the recipient is addressing meaningful access for individuals that are Limited English Proficient; whether there has been complaints or lawsuits filed against the recipient based on prohibited discrimination and whether there has been any findings; and whether the recipient's facilities are accessible to qualified individuals with disabilities.

B. Annual Reporting Burden

Respondents: 1,200.

Responses per Respondent: 1.

Total Responses: 1,200.

Hours per Response: 2.

Total Burden Hours: 2,400.

C. Public Comments

Public comments are particularly invited on: Whether this collection of information will have practical utility; whether our estimate of the public burden of this collection of information is accurate, and based on valid assumptions and methodology; ways to enhance the quality, utility, and clarity of the information to be collected; and ways in which we can minimize the burden of the collection of information on those who are to respond, through the use of appropriate technological collection techniques or other forms of information technology.

Obtaining Copies of Proposals: Requesters may obtain a copy of the information collection documents from the General Services Administration, Regulatory Secretariat Division (MVCB), 1800 F Street NW., Washington, DC 20405, telephone 202–501–4755. Please cite OMB Control No. 3090–XXXX, Nondiscrimination in Federal Financial Assistance Programs, GSA 3702, in all correspondence.

Dated: August 18, 2016.

David A. Shive,

Chief Information Officer.

[FR Doc. 2016–20319 Filed 8–23–16; 8:45 am]

BILLING CODE 6820–34–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[30 Day-16–0255]

Agency Forms Undergoing Paperwork Reduction Act Review

The Centers for Disease Control and Prevention (CDC) has submitted the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The notice for the proposed information collection is published to obtain comments from the public and affected agencies.

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address any of the following: (a) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) Evaluate the accuracy of the agencies estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) Enhance the quality, utility, and clarity of the information to be collected; (d) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses; and (e) Assess information collection costs.

To request additional information on the proposed project or to obtain a copy of the information collection plan and instruments, call (404) 639–7570 or send an email to *omb@cdc.gov.* Direct written comments and/or suggestions regarding the items contained in this notice to the Attention: CDC Desk Officer, Office of Management and Budget, Washington, DC 20503 or by fax to (202) 395–5806. Written comments should be received within 30 days of this notice.

Proposed Project

Resources and Services Database of the CDC National Prevention Information Network (NPIN)(OMB Control No. 0920–0255 exp. 12/31/2016)—Extension—National Center for HIV/AIDS, Viral Hepatitis, Sexually Transmitted Diseases, and Tuberculosis Prevention (NCHHSTP), Centers for Disease Control and Prevention (CDC).

Background and Brief Description

NCHHSTP has the primary responsibility within the CDC and the U.S. Public Health Service for the prevention and control of HIV infection, viral hepatitis, sexually transmitted diseases (STDs), and tuberculosis (TB), as well as for community-based HIV prevention activities, syphilis, and TB elimination programs. NPIN serves as the U.S. reference, referral, and distribution service for information on HIV/AIDS, viral hepatitis, STDs, and TB, supporting NCHHSTP's mission to link Americans to prevention, education, and care services. NPIN is a critical member of the network of government agencies, community organizations, businesses, health professionals, educators, and human services providers that educate the American public about the grave threat to public health posed by HIV/AIDS, viral hepatitis, STDs, and TB, and provides services for persons infected with human immunodeficiency virus (HIV). NPIN services are designed to facilitate program collaboration in sharing information, resources, published materials, research, and trends among the four diseases.

The NPIN Resources and Services Database contains entries on approximately 9,000 organizations and is the most comprehensive listing of HIV/AIDS, viral hepatitis, STD, and TB resources and services available throughout the country. The American public can also access the NPIN Resources and Services database through the NPIN Web site. More than 1,000,000 unique visitors and more than 3,000,000 page views are recorded annually.

To accomplish CDC's goal of continuing efforts to maintain an up-to-date, comprehensive database, NPIN plans each year to add up to 400 newly identified organizations and to verify those organizations currently described in the NPIN Resources and Services Database each year. Organizations with access to the Internet will be given the option to complete and submit an electronic version of the questionnaire by visiting the NPIN Web site. Methods to be used to collect the information include online, telephone and email survey questionnaires to collect information from representatives of the organizations that provide covered services.

The respondent population includes Registered Nurses, Social and Community Service Managers, Health Educators, Social and Human Service Assistants working within NPIN member organizations that provide HIV/AIDS, viral hepatitis, STD, and TB prevention, education, testing, and healthcare services. This data collection uses no inferential statistical methods. The data collected is in textual or anecdotal format and will be used for information purposes.

There is a total of 1,717 burden hours involved in this collection. There are no costs to respondents other than their time.

ESTIMATED ANNUALIZED BURDEN HOURS

Form	Respondents	Number of respondents	Number of responses per respondent	Average burden per response (in hours)
Initial Questionnaire Telephone Script.	Registered nurses, Social and community service managers, and Health educators.	400	1	15/60
Telephone Verification	Registered nurses, Social and community service managers, and Health educators Social and human service assistants.	6,100	1	10/60
Email Verification	Registered nurses, Health educators, and Social and human service assistants, social and community service managers.	3,000	1	12/60

Leroy A. Richardson,

Chief, Information Collection Review Office, Office of Scientific Integrity, Office of the Associate Director for Science, Office of the Director, Centers for Disease Control and Prevention.

[FR Doc. 2016–20259 Filed 8–23–16; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

[Document Identifier: CMS–10455 and CMS–R–290]

Agency Information Collection Activities: Submission for OMB Review; Comment Request

AGENCY: Centers for Medicare & Medicaid Services, HHS.

ACTION: Notice.

SUMMARY: The Centers for Medicare & Medicaid Services (CMS) is announcing an opportunity for the public to comment on CMS' intention to collect information from the public. Under the Paperwork Reduction Act of 1995 (PRA), federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension or reinstatement of an existing collection of information, and to allow a second opportunity for public comment on the notice. Interested persons are invited to send comments regarding the burden estimate or any other aspect of this collection of information, including any of the following subjects: (1) The necessity and utility of the proposed information collection for the proper performance of the agency's functions; (2) the accuracy of the estimated burden; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

DATES: Comments on the collection(s) of information must be received by the OMB desk officer by *September 23, 2016.*

ADDRESSES: When commenting on the proposed information collections, please reference the document identifier or OMB control number. To be assured consideration, comments and recommendations must be received by the OMB desk officer via one of the following transmissions:

OMB, Office of Information and Regulatory Affairs.
Attention: CMS Desk Officer.
Fax Number: (202) 395–5806 *OR*
Email: *OIRA_submission@omb.eop.gov.*

To obtain copies of a supporting statement and any related forms for the proposed collection(s) summarized in this notice, you may make your request using one of following:

1. Access CMS' Web site address at *http://www.cms.hhs.gov/PaperworkReductionActof1995.*

2. Email your request, including your address, phone number, OMB number, and CMS document identifier, to *Paperwork@cms.hhs.gov.*

3. Call the Reports Clearance Office at (410) 786–1326.

FOR FURTHER INFORMATION CONTACT: Reports Clearance Office at (410) 786–1326.

SUPPLEMENTARY INFORMATION: Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501–3520), federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. The term "collection of information" is defined in 44 U.S.C. 3502(3) and 5 CFR 1320.3(c) and includes agency requests or requirements that members of the public submit reports, keep records, or provide information to a third party. Section 3506(c)(2)(A) of the PRA (44 U.S.C. 3506(c)(2)(A)) requires federal agencies to publish a 30-day notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension or reinstatement of an existing collection of information, before submitting the collection to OMB for approval. To comply with this requirement, CMS is publishing this notice that summarizes the following proposed collection(s) of information for public comment:

1. *Type of Information Collection Request:* Extension of a currently approved collection; *Title of Information Collection:* Report of a Hospital Death Associated with Restraint or Seclusion; *Use:* Executive Order 13563, Improving Regulation and Regulatory Review, was signed on January 18, 2011. The order recognized the importance of a streamlined, effective, and efficient regulatory framework designed to promote economic growth, innovation, job creation, and competitiveness. Each agency was directed to establish an ongoing plan to reduce or eliminate burdensome, obsolete, or unnecessary regulations to create a more efficient and flexible structure.

The regulation that was published on May, 16, 2012 (77 FR 29034) included a reduction in the reporting requirement related to hospital deaths associated with the use of restraint or seclusion, § 482.13(g). Hospitals are no longer required to report to CMS those deaths where there was no use of seclusion and the only restraint was 2-point soft wrist restraints. It is estimated that this will reduce the volume of reports that must be submitted by 90 percent for hospitals. In addition, the final rule replaced the previous requirement for reporting via telephone to CMS, which proved to be cumbersome for both CMS and hospitals, with a requirement that allows submission of reports via telephone, facsimile or electronically, as determined by CMS. Finally, the amount of information that CMS needs for each death report in order for CMS to determine whether further on-site investigation is needed has been reduced.

The Child Health Act (CHA) of 2000 established in Title V, Part H, Section 591 of the Public Health Service Act (PHSA) minimum requirements concerning the use of restraints and seclusion in facilities that receive support with funds appropriated to any Federal department or agency. In addition, the CHA enacted Section 592 of the PHSA, which establishes minimum mandatory reporting requirements for deaths in such facilities associated with use of restraint or seclusion. Provisions implementing this statutory reporting requirement for hospitals participating in Medicare are found at 42 CFR 482.13(g), as revised in the final rule that published on May 16, 2012 (77 FR 29034). *Form Number:* CMS–10455 (OMB control number: 0938–1210); *Frequency:* Occasionally; *Affected Public:* Private Sector; *Number of Respondents:* 6,225; *Number of Responses:* 6,225; *Total Annual Hours:* 2,054. (For policy questions regarding this collection contact Karina Meushaw at 410–786–1000.)

2. *Type of Information Collection Request:* Extension of a currently approved collection; *Title:* Medicare Program: Procedures for Making National Coverage Decisions; *Use:* We revised our April 27, 1999 (64 FR 22619) notice and published a new notice on September 26, 2003 (68 FR 55634) that described the process we use to make Medicare coverage decisions including decisions regarding whether new technology and services can be covered. We have made changes to our internal procedures in response to the comments we received following publication of the 1999 notice and experience under our new process. Over the past several years, we received numerous suggestions to further revise our process to continue to make it more

open, responsive, and understandable to the public. We share the goal of increasing public participation in the development of Medicare coverage issues. This will assist us in obtaining the information we require to make a national coverage determination in a timely manner and ensuring that the Medicare program continues to meet the needs of its beneficiaries. *Form Number:* CMS–R–290 (OMB control number: 0938–0776); *Frequency:* Annual; *Affected Public:* Private Sector: Business or other for-profits; *Number of Respondents:* 200; *Total Annual Responses:* 200; *Total Annual Hours:* 8,000. (For policy questions regarding this collection contact Katherine Tillman at 410–786–9252.)

Dated: August 18, 2016.

William N. Parham, III,

Director, Paperwork Reduction Staff, Office of Strategic Operations and Regulatory Affairs.

[FR Doc. 2016–20216 Filed 8–23–16; 8:45 am]

BILLING CODE 4120–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

[CMS–7042–N]

Health Insurance Marketplace^{SM}; and the Medicare, Medicaid, and Children's Health Insurance Programs; Meeting of the Advisory Panel on Outreach and Education (APOE), September 21, 2016

AGENCY: Centers for Medicare & Medicaid Services (CMS), HHS.

ACTION: Notice of meeting.

SUMMARY: This notice announces the new meeting of the Advisory Panel on Outreach and Education (APOE) (the Panel) in accordance with the Federal Advisory Committee Act. The Panel advises and makes recommendations to the Secretary of the U.S. Department of Health and Human Services (HHS) and the Administrator of the Centers for Medicare & Medicaid Services (CMS) on opportunities to enhance the effectiveness of Health Insurance Marketplace^{SM} and the Medicare, Medicaid, and Children's Health Insurance Programs consumer education strategies. This meeting is open to the public.

DATES: *Meeting Date:* Wednesday, September 21, 2016, 8:30 a.m. to 4:00 p.m. eastern daylight time (e.d.t.).

Deadline for Meeting Registration, Presentations, Special Accommodations and Comments: Wednesday, September 7, 2016, 5:00 p.m., e.d.t.

ADDRESSES: *Meeting Location:* U.S. Department of Health & Human Services, Hubert H. Humphrey Building, 200 Independence Avenue SW., Room 425A, Conference Room, Washington, DC 20201.

Presentations and Written Comments: Presentations and written comments should be submitted to: Abigail Huffman, Designated Federal Official (DFO), Division of Forum and Conference Development, Office of Communications, Centers for Medicare & Medicaid Services, 7500 Security Boulevard, Mailstop S1–05–06, Baltimore, MD 21244–1850 or via email at *Abigail.Huffman1@cms.hhs.gov.*

Registration: The meeting is open to the public, but attendance is limited to the space available. Persons wishing to attend this meeting must register at the Web site *https://www.regonline.com/apoesept2016meeting* or by contacting the DFO as listed in the **FOR FURTHER INFORMATION CONTACT** section of this notice, by the date listed in the **DATES** section of this notice. Individuals requiring sign language interpretation or other special accommodations should contact the DFO at the address listed in the **ADDRESSES** section of this notice by the date listed in the **DATES** section of this notice.

FOR FURTHER INFORMATION CONTACT: Abigail Huffman, Designated Federal Official, Office of Communications, CMS, 7500 Security Boulevard, Mail Stop S1–05–06, Baltimore, MD 21244, 410–786–0897, email *Abigail.Huffman1@cms.hhs.gov.* Additional information about the APOE is available on the Internet at: *http://www.cms.gov/Regulations-and-Guidance/Guidance/FACA/APOE.html.* Press inquiries are handled through the CMS Press Office at (202) 690–6145.

SUPPLEMENTARY INFORMATION:

I. Background

The Advisory Panel for Outreach and Education (APOE) (the Panel) is governed by the provisions of Federal Advisory Committee Act (FACA) (Pub. L. 92–463), as amended (5 U.S.C. Appendix 2), which sets forth standards for the formation and use of federal advisory committees. The Panel is authorized by section 1114(f) of the Social Security Act (42 U.S.C. 1314(f)) and section 222 of the Public Health Service Act (42 U.S.C. 217a).

The Secretary of the U.S. Department of Health and Human Services (HHS) (the Secretary) signed the charter establishing the Citizen's Advisory Panel on Medicare Education[1] (the predecessor to the APOE) on January 21, 1999 (64 FR 7899, February 17, 1999) to advise and make recommendations to the Secretary and the Administrator of the Centers for Medicare & Medicaid Services (CMS) on the effective implementation of national Medicare education programs, including with respect to the Medicare+Choice (M+C) program added by the Balanced Budget Act of 1997 (Pub. L. 105–33).

The Medicare Modernization Act of 2003 (MMA) (Pub. L. 108–173) expanded the existing health plan options and benefits available under the M+C program and renamed it the Medicare Advantage (MA) program. We have had substantial responsibilities to provide information to Medicare beneficiaries about the range of health plan options available and better tools to evaluate these options. The successful MA program implementation required CMS to consider the views and policy input from a variety of private sector constituents and to develop a broad range of public-private partnerships.

In addition, Title I of the MMA authorized the Secretary and the Administrator of CMS (by delegation) to establish the Medicare prescription drug benefit. The drug benefit allows beneficiaries to obtain qualified prescription drug coverage. In order to effectively administer the MA program and the Medicare prescription drug benefit, we have substantial responsibilities to provide information to Medicare beneficiaries about the range of health plan options and benefits available, and to develop better tools to evaluate these plans and benefits.

The Affordable Care Act (Patient Protection and Affordable Care Act, Public Law 111–148, and Health Care and Education Reconciliation Act of 2010, Public Law 111–152) expanded the availability of other options for health care coverage and enacted a number of changes to Medicare as well as to Medicaid and the Children's Health Insurance Program (CHIP). Qualified individuals and qualified employers are now able to purchase private health insurance coverage through competitive marketplaces, called Affordable Insurance Exchanges (we also call an Exchange a Health

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[1] We note that the Citizen's Advisory Panel on Medicare Education is also referred to as the Advisory Panel on Medicare Education (65 FR 4617). The name was updated in the Second Amended Charter approved on July 24, 2000.

Insurance Marketplace^{SM}[2] or Marketplace^{SM}). In order to effectively implement and administer these changes, we must provide information to consumers, providers, and other stakeholders through education and outreach programs regarding how existing programs will change and the expanded range of health coverage options available, including private health insurance coverage through a Marketplace^{SM}. The APOE (the Panel) allows us to consider a broad range of views and information from interested audiences in connection with this effort and to identify opportunities to enhance the effectiveness of education strategies concerning the Affordable Care Act.

The scope of this panel also includes advising on issues pertaining to the education of providers and stakeholders with respect to the Affordable Care Act and certain provisions of the Health Information Technology for Economic and Clinical Health (HITECH) Act enacted as part of the American Recovery and Reinvestment Act of 2009 (ARRA).

On January 21, 2011, the Panel's charter was renewed and the Panel was renamed the Advisory Panel for Outreach and Education. The Panel's charter was most recently renewed on January 21, 2015, and will terminate on January 21, 2017 unless renewed by appropriate action.

Under the current charter, the APOE will advise the Secretary and the Administrator on optimal strategies for the following:

- Developing and implementing education and outreach programs for individuals enrolled in, or eligible for, Medicare, Medicaid, and CHIP or coverage available through the Health Insurance Marketplace^{SM}.
- Enhancing the federal government's effectiveness in informing Health Insurance Marketplace^{SM}, Medicare, Medicaid, and CHIP consumers, issuers, providers, and stakeholders, through education and outreach programs, on issues regarding these programs, including the appropriate use of public-private partnerships to leverage the resources of the private sector in educating beneficiaries, providers, and stakeholders.
- Expanding outreach to vulnerable and underserved communities, including racial and ethnic minorities, in the context of Health Insurance Marketplace^{SM}, Medicare, Medicaid, and CHIP education programs.
- Assembling and sharing an information base of "best practices" for helping consumers evaluate health coverage options.
- Building and leveraging existing community infrastructures for information, counseling, and assistance.
- Drawing the program link between outreach and education, promoting consumer understanding of health care coverage choices, and facilitating consumer selection/enrollment, which in turn support the overarching goal of improved access to quality care, including prevention services, envisioned under the Affordable Care Act.

The current members of the Panel are: Kellan Baker, Associate Director, Center for American Progress; Robert Blancato, President, Matz, Blancato & Associates; Dale Blasier, Professor of Orthopaedic Surgery, Department of Orthopaedics, Arkansas Children's Hospital; Deborah Britt, Executive Director of Community & Public Relations, Piedmont Fayette Hospital; Deena Chisolm, Associate Professor of Pediatrics & Public Health, The Ohio State University, Nationwide Children's Hospital; Josephine DeLeon, Director, Anti-Poverty Initiatives, Catholic Charities of California; Robert Espinoza, Vice President of Policy, Paraprofessional Healthcare Institute; Jennifer Gross, Manager of Political Field Operations, Planned Parenthood of Montana; Louise Scherer Knight, Director, The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins; Roanne Osborne-Gaskin, M.D., Senior Medical Director, MDWise, Inc.; Cathy Phan, Outreach and Education Coordinator, Asian American Health Coalition DBA HOPE Clinic; Kamilah Pickett, Litigation Support, Independent Contractor; Brendan Riley, Outreach and Enrollment Coordinator, NC Community Health Center Association; Alvia Siddiqi, Medical Director, Advocate Physician Partners; Carla Smith, Executive Vice President, Healthcare Information and Management Systems Society (HIMSS); Tobin Van Ostern, Vice President and Co-Founder, Young Invincibles Advisors; and Paula Villescaz, Senior Consultant, Assembly Health Committee, California State Legislature.

II. Provisions of This Notice

In accordance with section 10(a) of the FACA, this notice announces a meeting of the APOE. The agenda for the September 21, 2016 meeting will include the following:

- Welcome and listening session with CMS leadership
- Recap of the previous (June 22, 2016) meeting
- Affordable Care Act initiatives
- An opportunity for public comment
- Meeting summary, review of recommendations, and next steps

Individuals or organizations that wish to make a 5-minute oral presentation on an agenda topic should submit a written copy of the oral presentation to the DFO at the address listed in the **ADDRESSES** section of this notice by the date listed in the **DATES** section of this notice. The number of oral presentations may be limited by the time available. Individuals not wishing to make an oral presentation may submit written comments to the DFO at the address listed in the **ADDRESSES** section of this notice by the date listed in the **DATES** section of this notice.

III. Security, Building, and Parking Guidelines

This meeting will be held in a federal government building; therefore, federal security measures are applicable. The Real ID Act, enacted in 2005, establishes minimum standards for the issuance of state-issued driver's licenses and identification (ID) cards. It prohibits federal agencies from accepting an official driver's license or ID card from a state unless the Department of Homeland Security determines that the state meets these standards. Beginning October 2015, photo IDs (such as a valid driver's license) issued by a state or territory not in compliance with the Real ID Act will not be accepted as identification to enter federal buildings. Visitors from these states/territories will need to provide alternative proof of identification (such as a valid passport) to gain entrance into CMS buildings. The current list of states from which a federal agency may accept driver's licenses for an official purpose is found at *http://www.dhs.gov/real-id-enforcement-brief*. We recommend that confirmed registrants arrive reasonably early, but no earlier than 45 minutes prior to the start of the meeting, to allow additional time to clear security. Security measures include the following:

- Presentation of government issued photographic identification to the Federal Protective Service or Guard Service personnel.
- Inspection of vehicle's interior and exterior (this includes engine and trunk inspection) at the entrance to the grounds. Parking permits and instructions will be issued after the vehicle inspection.
- Inspection, via metal detector or other applicable means, of all persons entering the building. We note that all items brought into CMS, whether personal or for the purpose of

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[2] Health Insurance Marketplace^{SM} and Marketplace^{SM} are service marks of the U.S. Department of Health & Human Services.

presentation or to support a presentation, are subject to inspection. We cannot assume responsibility for coordinating the receipt, transfer, transport, storage, set up, safety, or timely arrival of any personal belongings or items used for presentation or to support a presentation.

Note: Individuals who are not registered in advance will not be permitted to enter the building and will be unable to attend the meeting. The public may not enter the building earlier than 45 minutes prior to the convening of the meeting.

All visitors must be escorted in areas other than the lower and first floor levels in the Central Building.

Authority: Sec. 222 of the Public Health Service Act (42 U.S.C. 217a) and sec. 10(a) of Pub. L. 92–463 (5 U.S.C. App. 2, sec. 10(a) and 41 CFR 102–3).

Dated: August 16, 2016.

Andrew M. Slavitt,

Acting Administrator, Centers for Medicare & Medicaid Services.

[FR Doc. 2016–20187 Filed 8–23–16; 8:45 am]

BILLING CODE 4120–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2015–D–1580]

Patient Preference Information—Voluntary Submission, Review in Premarket Approval Applications, Humanitarian Device Exemption Applications, and De Novo Requests, and Inclusion in Decision Summaries and Device Labeling; Guidance for Industry, Food and Drug Administration Staff and Other Stakeholders; Availability

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice of availability.

SUMMARY: The Food and Drug Administration (FDA or Agency) is announcing the availability of the guidance entitled "Patient Preference Information—Voluntary Submission, Review in PMAs, HDE Applications, and *De Novo* Requests, and Inclusion in Decision Summaries and Device Labeling." This document explains the principal concepts that sponsors and other stakeholders should consider when choosing to collect patient preference information (PPI), which may inform FDA's benefit-risk determinations in the premarket review of premarket approval applications (PMAs), humanitarian device exemption (HDE) applications, and *de novo* classification requests. This guidance also discusses FDA's inclusion of PPI in its decision summaries and provides recommendations for the inclusion of such information in device labeling for certain devices. FDA is also issuing a Level 2 updated version of the guidance document entitled "Factors To Consider When Making Benefit-Risk Determinations in Medical Device Premarket Approval and *De Novo* Classifications," originally issued on March 28, 2012, that has been edited to be consistent with this guidance document.

DATES: Submit either electronic or written comments on this guidance at any time. General comments on Agency guidance documents are welcome at any time.

ADDRESSES: You may submit comments as follows:

Electronic Submissions

Submit electronic comments in the following way:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments. Comments submitted electronically, including attachments, to *http://www.regulations.gov* will be posted to the docket unchanged. Because your comment will be made public, you are solely responsible for ensuring that your comment does not include any confidential information that you or a third party may not wish to be posted, such as medical information, your or anyone else's Social Security number, or confidential business information, such as a manufacturing process. Please note that if you include your name, contact information, or other information that identifies you in the body of your comments, that information will be posted on *http://www.regulations.gov.*
- If you want to submit a comment with confidential information that you do not wish to be made available to the public, submit the comment as a written/paper submission and in the manner detailed (see "Written/Paper Submissions" and "Instructions").

Written/Paper Submissions

Submit written/paper submissions as follows:

- *Mail/Hand delivery/Courier (for written/paper submissions):* Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.
- For written/paper comments submitted to the Division of Dockets Management, FDA will post your comment, as well as any attachments, except for information submitted, marked and identified, as confidential, if submitted as detailed in "Instructions."

Instructions: All submissions received must include the Docket No. FDA–2015–D–1580 for "Patient Preference Information—Voluntary Submission, Review in PMAs, HDE Applications, and *De Novo* Requests, and Inclusion in Decision Summaries and Device Labeling." If you are making submissions that also address the edits to the Level 2 guidance, the submissions received must include the Docket No. FDA–2011–D–0577 for "Factors To Consider When Making Benefit-Risk Determinations in Medical Device Premarket Approval and *De Novo* Classifications." Received comments will be placed in the docket(s) noted and, except for those submitted as "Confidential Submissions," publicly viewable at *http://www.regulations.gov* or at the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

- Confidential Submissions—To submit a comment with confidential information that you do not wish to be made publicly available, submit your comments only as a written/paper submission. You should submit two copies total. One copy will include the information you claim to be confidential with a heading or cover note that states "THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION." The Agency will review this copy, including the claimed confidential information, in its consideration of comments. The second copy, which will have the claimed confidential information redacted/blacked out, will be available for public viewing and posted on *http://www.regulations.gov.* Submit both copies to the Division of Dockets Management. If you do not wish your name and contact information to be made publicly available, you can provide this information on the cover sheet and not in the body of your comments and you must identify this information as "confidential." Any information marked as "confidential" will not be disclosed except in accordance with 21 CFR 10.20 and other applicable disclosure law. For more information about FDA's posting of comments to public dockets, see 80 FR 56469, September 18, 2015, or access the information at: *http://www.fda.gov/regulatoryinformation/dockets/default.htm.*

Docket: For access to the docket to read background documents or the electronic and written/paper comments received, go to *http://www.regulations.gov* and insert the docket number, found in brackets in the heading of this document, into the "Search" box and follow the prompts and/or go to the Division of Dockets Management, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

An electronic copy of the guidance document is available for download from the Internet. See the **SUPPLEMENTARY INFORMATION** section for information on electronic access to the guidance. Submit written requests for a single hard copy of the guidance document entitled "Patient Preference Information—Voluntary Submission, Review in PMAs, HDE Applications, and *De Novo* Requests, and Inclusion in Decision Summaries and Device Labeling" to the Office of the Center Director, Guidance and Policy Development, Center for Devices and Radiological Health, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 66, Rm. 5431, Silver Spring, MD 20993–0002; or the Office of Communication, Outreach, and Development, Center for Biologics Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 71, Rm. 3128, Silver Spring, MD 20993–0002. Send one self-addressed adhesive label to assist that office in processing your request.

FOR FURTHER INFORMATION CONTACT: Anindita Saha, Center for Devices and Radiological Health, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 66, Rm. 5414, Silver Spring, MD 20993–0002, 301–796–2537, *Anindita.Saha@fda.hhs.gov;* or Stephen Ripley, Center for Biologics Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 71, Rm. 7301, Silver Spring, MD 20993, 240–402–7911.

SUPPLEMENTARY INFORMATION:

I. Background

FDA is announcing the availability of a guidance entitled "Patient Preference Information—Voluntary Submission, Review in PMAs, HDE Applications, and *De Novo* Requests, and Inclusion in Decision Summaries and Device Labeling." FDA believes that patients can and should bring their own experiences to bear in helping the Agency to evaluate the benefit-risk profiles of certain devices. This kind of input can be important to consider during FDA's decisionmaking for these devices.

This document explains the principal concepts that sponsors and other stakeholders should consider when choosing to collect PPI, which may inform FDA's benefit-risk determinations in the premarket review of PMAs, HDE applications, and *de novo* requests. This guidance also discusses FDA's inclusion of PPI in its decision summaries and provides recommendations for the inclusion of such information in device labeling for certain devices.

The objectives of this guidance are: (1) To encourage submission of PPI, if available, by sponsors or other stakeholders to FDA and to aid in FDA decisionmaking; (2) to outline recommended qualities of patient preference studies, which may result in valid scientific evidence; (3) to provide recommendations for collecting and submitting PPI to FDA; and (4) to discuss FDA's inclusion of PPI in its decision summaries and provide recommendations for the inclusion of such information in device labeling, where appropriate. The guidance also includes hypothetical examples that illustrate how PPI may inform FDA's decisionmaking. The guidance applies to both diagnostic and therapeutic devices that are subject to these review processes. Additionally, this guidance may be information to other stakeholders such as patient groups and academia who may wish to conduct patient preference studies.

In the **Federal Register** of May 18, 2015 (80 FR 28277), FDA announced the availability of the draft of this guidance and interested persons were invited to comment by August 17, 2015. FDA has considered all of the public comments received in finalizing this guidance.

FDA is also issuing a Level 2 update to the guidance document entitled "Factors To Consider When Making Benefit-Risk Determinations in Medical Device Premarket Approval and *De Novo* Classifications," which was originally issued on March 28, 2012, to ensure consistency with the terminology and concepts presented in this guidance.

II. Significance of Guidance

This guidance is being issued consistent with FDA's good guidance practices regulation (21 CFR 10.115). The guidance represents the current thinking of FDA on "Patient Preference Information—Voluntary Submission, Review in PMAs, HDE Applications, and *De Novo* Requests, and Inclusion in Decision Summaries and Device Labeling." It does not establish any rights for any person and is not binding on FDA or the public. You can use an alternative approach if it satisfies the requirements of the applicable statutes and regulations.

III. Electronic Access

Persons interested in obtaining a copy of the guidance may do so by downloading an electronic copy from the Internet. A search capability for all Center for Devices and Radiological Health guidance documents is available at *http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/default.htm.* Guidance documents are also available at *http://www.fda.gov/BiologicsBloodVaccines/GuidanceComplianceRegulatoryinformation/Guidances/default.htm* or *http://www.regulations.gov.* Persons unable to download an electronic copy of "Patient Preference Information—Voluntary Submission, Review in PMAs, HDE Applications, and *De Novo* Requests, and Inclusion in Decision Summaries and Device Labeling" or "Factors To Consider When Making Benefit-Risk Determinations in Medical Device Premarket Approval and *De Novo* Classifications" may send an email request to *CDRH-Guidance@fda.hhs.gov* to receive an electronic copy of the document. Please use the document number 1500006 or 1772 respectively to identify the guidance you are requesting.

IV. Paperwork Reduction Act of 1995

This guidance refers to currently approved collections of information found in FDA regulations. These collections of information are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520). The collections of information in 21 CFR 812.25(c) have been approved under OMB control number 0910–0078; the collections of information in 21 CFR part 807, subpart E have been approved under OMB control number 0910–0120; the collections of information in 21 CFR part 814, subparts B and E have been approved under OMB control number 0910–0231; the collections of information in 21 CFR part 814, subpart H have been approved under OMB control number 0910–0332; the collections of information in 21 CFR part 822 have been approved under OMB control number 0910–0449; the collections of information in 21 CFR part 801 have been approved under OMB control number 0910–0485; and the collections of information in the guidance document "Requests for Feedback on Medical Device Submissions: The Pre-Submission Program and Meetings with Food and Drug Administration Staff" have been approved under OMB control number 0910–0756.

Leslie Kux,

Associate Commissioner for Policy.

[FR Doc. 2016–20221 Filed 8–23–16; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2007–D–0369]

Bioequivalence Recommendations for Fidaxomicin; Draft Guidance for Industry; Availability

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice of availability.

SUMMARY: The Food and Drug Administration (FDA) is announcing the availability of a draft guidance for industry on generic fidaxomicin tablets entitled "Draft Guidance on Fidaxomicin." The recommendations provide specific guidance on the design of bioequivalence (BE) studies to support abbreviated new drug applications (ANDAs) for fidaxomicin tablets.

DATES: Although you can comment on any guidance at any time (see 21 CFR 10.115(g)(5)), to ensure that the Agency considers your comment on this draft guidance before it begins work on the final version of the guidance, submit either electronic or written comments on the draft guidance by October 24, 2016.

ADDRESSES: You may submit comments as follows:

Electronic Submissions

Submit electronic comments in the following way:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments. Comments submitted electronically, including attachments, to *http://www.regulations.gov* will be posted to the docket unchanged. Because your comment will be made public, you are solely responsible for ensuring that your comment does not include any confidential information that you or a third party may not wish to be posted, such as medical information, your or anyone else's Social Security number, or confidential business information, such as a manufacturing process. Please note that if you include your name, contact information, or other information that identifies you in the body of your comments, that information will be posted on *http://www.regulations.gov.*

with confidential information that you do not wish to be made available to the public, submit the comment as a written/paper submission and in the manner detailed (see "Written/Paper Submissions" and "Instructions").

Written/Paper Submissions

Submit written/paper submissions as follows:

- *Mail/Hand delivery/Courier (for written/paper submissions):* Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.
- For written/paper comments submitted to the Division of Dockets Management, FDA will post your comment, as well as any attachments, except for information submitted, marked and identified, as confidential, if submitted as detailed in "Instructions."

Instructions: All submissions received must include the Docket No. FDA–2007–D–0369 for "Draft Guidance on Fidaxomicin." Received comments will be placed in the docket and, except for those submitted as "Confidential Submissions," will be publicly viewable at *http://www.regulations.gov* or at the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

- Confidential Submissions—To submit a comment with confidential information that you do not wish to be made publicly available, submit your comments only as a written/paper submission. You should submit two copies total. One copy will include the information you claim to be confidential with a heading or cover note that states "THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION." The Agency will review this copy, including the claimed confidential information, in its consideration of comments. The second copy, which will have the claimed confidential information redacted/blacked out, will be available for public viewing and posted on *http://www.regulations.gov.* Submit both copies to the Division of Dockets Management. If you do not wish your name and contact information to be made publicly available, you can provide this information on the cover sheet and not in the body of your comments and you must identify this information as "confidential." Any information marked as "confidential" will not be disclosed except in accordance with 21 CFR 10.20 and other applicable disclosure law. For more information about FDA's posting of comments to public dockets, see 80 FR 56469, September 18, 2015, or access

regulatoryinformation/dockets/default.htm.

Docket: For access to the docket to read background documents or the electronic and written/paper comments received, go to *http://www.regulations.gov* and insert the docket number, found in brackets in the heading of this document, into the "Search" box and follow the prompts and/or go to the Division of Dockets Management, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

Submit written requests for single copies of the draft guidance to the Division of Drug Information, Center for Drug Evaluation and Research, Food and Drug Administration, 10001 New Hampshire Ave., Hillandale Building, 4th Floor, Silver Spring, MD 20993–0002. Send one self-addressed adhesive label to assist that office in processing your requests. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the draft guidance document.

FOR FURTHER INFORMATION CONTACT: Xiaoqiu Tang, Center for Drug Evaluation and Research (HFD–600), Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 75, Rm. 4730, Silver Spring, MD 20993–0002, 301–796–5850.

SUPPLEMENTARY INFORMATION:

I. Background

In the **Federal Register** of June 11, 2010 (75 FR 33311), FDA announced the availability of a guidance for industry entitled "Bioequivalence Recommendations for Specific Products," which explained the process that would be used to make product-specific BE recommendations available to the public on FDA's Web site at *http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm.*

As described in that guidance, FDA adopted this process to develop and disseminate product-specific BE recommendations and to provide a meaningful opportunity for the public to consider and comment on those recommendations. This notice announces the availability of draft BE recommendations for generic fidaxomicin tablets.

FDA initially approved new drug application (NDA) 201699 for DIFICID (fidaxomicin) in May 2011. Currently, there are no approved ANDAs for this product. We are now issuing a draft guidance for industry on BE recommendations for generic fidaxomicin tablets ("Draft Guidance on Fidaxomicin").

On May 6, 2015, Cubist Pharmaceuticals, Inc. submitted a citizen petition requesting that "FDA impose scientifically-appropriate standards for demonstrating BE for ANDAs and 505(b)(2) new drug applications" citing to DIFICID as the reference listed drug. FDA has reviewed the issues raised in the citizen petition and is responding to the citizen petition (Docket No. FDA–2015–P–1595, available at *http://www.regulations.gov*).

This draft guidance is being issued consistent with FDA's good guidance practices regulation (21 CFR 10.115). The draft guidance, when finalized, will represent the current thinking of FDA on the design of BE studies to support ANDAs for fidaxomicin tablets. It does not establish any rights for any person and is not binding on FDA or the public. You can use an alternative approach if it satisfies the requirements of the applicable statutes and regulations.

II. Electronic Access

Persons with access to the Internet may obtain the draft guidance at either *http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm* or *http://www.regulations.gov*.

Dated: August 18, 2016.

Jeremy Sharp,

Deputy Commissioner for Policy, Planning, Legislation, and Analysis.

[FR Doc. 2016–20146 Filed 8–23–16; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

Advisory Council on Blood Stem Cell Transplantation; Notice of Meeting

SUMMARY: In accordance with section 10(a)(2) of the Federal Advisory Committee Act, notice is hereby given of the following meeting of the Advisory Council on Blood Stem Cell Transplantation (ACBSCT).

DATES:

September 13, 2016, from 8:00 a.m. to 4:00 p.m. Eastern Time.
September 14, 2016, from 8:00 a.m. to 12:30 p.m. Eastern Time.

ADDRESSES: Crystal Gateway Marriott, 1700 Jefferson Davis Highway, Arlington, VA 22202.

FOR FURTHER INFORMATION CONTACT: Robert Walsh, Executive Secretary, Division of Transplantation, Healthcare Systems Bureau, Health Resources and Services Administration, 5600 Fishers Lane, Room 8W60, Rockville, MD 20857; telephone (301) 443–6839.

SUPPLEMENTARY INFORMATION:

Status: The meeting will be open to the public.

Purpose: Pursuant to Public Law 109–129, 42 U.S.C. 274k (session 379 of the Public Health Service Act, as amended), the ACBSCT advises the Secretary of the Department of Health and Human Services and Administrator, Health Resources and Services Administration (HRSA), on matters related to the activities of the C.W. Bill Young Cell Transplantation Program (Program) and the National Cord Blood Inventory Program.

Agenda: The Council will discuss trends in the usage of various sources of blood stem cells used in unrelated blood stem cell transplants, utilization of cord blood, blood stem cell transplantation for treatment of sickle cell disease, and late effects in blood and marrow transplantation, among other topics. The Council will also receive a program update from the HRSA Division of Transplantation (DoT). Agenda items are subject to change as priorities indicate.

After Council discussions, members of the public will have an opportunity to provide comment. Because of the Council's full agenda and timeframe in which to cover the agenda topics, public comment will be limited. All public comments will be included in the record of the ACBSCT meeting.

The draft meeting agenda will be posted on *www.ACBSCTmeeting.org.* Those participating at this meeting should pre-register by visiting *www.ACBSCTmeeting.org.* The deadline to pre-register for this meeting is Friday, September 9, 2016. Registration will be confirmed on site. For all logistical questions and concerns, please contact Susie Gingrich, Leonard Resource Group, at (202) 289–8322 or send an email to *sgringrich@lrginc.com.*

Participants can also join this meeting via teleconference by:

1. (Audio Portion) Calling the Conference Phone Number (1–800–832–0736) and providing the Participant Passcode (1337210); and
2. (Visual Portion) Connecting to the ACBSCT Adobe Connect Pro Meeting using the following URL *https://lrg.adobeconnect.com/acbsct/* and entering as GUEST: (Copy and paste the link into your browser if it does not work directly, and enter as a guest). Participants should plan to call and connect 15 minutes prior to the meeting for logistics to be set up. If you have never attended an Adobe Connect meeting, please test your connection using the following URL: *http://www.adobe.com/go/meeting_test.* In order to obtain a quick overview, go to the following URL: *http://www.adobe.com/go/connectpro_overview.* Call (202) 289–8322 or email Susie Gingrich at *sgringrich@lrginc.com* if you are having trouble connecting to the meeting site.

Public Comment: It is preferred that persons interested in providing an oral presentation email a written request, along with a copy of your presentation, to Robert Walsh, Executive Secretary, at *RWalsh@hrsa.gov.* Requests should contain the name, address, telephone number, email address, and any business or professional affiliation of the person desiring to make an oral presentation. Groups having similar interests are encouraged to combine their comments and present them through a single representative.

The allocation of time may be adjusted to accommodate the level of expressed interest. Persons who do not file an advance request for a presentation, but desire to make an oral statement, may request it during the public comment period. Public participation and ability to comment will be limited as time permits.

Jason E. Bennett

Director, Division of the Executive Secretariat.

[FR Doc. 2016–20198 Filed 8–23–16; 8:45 am]

BILLING CODE 4165–15–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Secretary

[Document Identifier: OMB # 0990–0424–30D]

Agency Information Collection Activities; Proposed Collection; Public Comment Request

AGENCY: Office of the Assistant Secretary for Health, Office of Adolescent Health, HHS.

ACTION: Notice.

SUMMARY: In compliance with section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995, the Office of the Secretary (OS), Department of Health and Human Services, announces plans to submit a Information Collection Request (ICR), described below, to the Office of Management and Budget (OMB). Prior to submitting that ICR to OMB, OS seeks comments from the public regarding the burden estimate, below, or any other aspect of the ICR.

DATES: Comments on the ICR must be received on or before September 23, 2016.

ADDRESSES: Submit your comments to *Information.CollectionClearance@hhs.gov* or by calling (202) 690–6162.

FOR FURTHER INFORMATION CONTACT: Information Collection Clearance staff, *Information.CollectionClearance@hhs.gov* or (202) 690–6162.

SUPPLEMENTARY INFORMATION: When submitting comments or requesting information, please include the document identifier OMB # 0990–0424–30D for reference.

Information Collection Request Title: Positive Adolescent Futures (PAF) Study

Abstract: The Office of Adolescent Health (OAH), U.S. Department of Health and Human Services (HHS) is requesting approval by OMB on a revised data collection. The Positive Adolescent Futures (PAF) Study will provide information about program design, implementation, and impacts through a rigorous assessment of program impacts and implementation of two programs designed to support expectant and parenting teens. These programs are located in Houston, Texas and throughout the state of California. This revised information collection request includes the 24-month follow-up survey instrument related to the impact study. The data collected from this instrument in the two study sites will provide a detailed understanding of program impacts about two years after youth are enrolled in the study and first have access to the programming offered by each site.

Need and Proposed Use of the Information: The data will be used to determine program effectiveness by comparing outcomes on repeat pregnancies, sexual risk behaviors, health and well-being, and parenting behaviors between treatment (program) and control youth. The data will also be used to understand whether the programs are more effective for some youth than others. The findings will be of interest to the general public, to policymakers, and to organizations interested in supporting expectant and parenting teens.

Likely Respondents: The 24-month follow-up survey data will be collected through a web-based survey or through telephone interviews with study participants. The mode of survey administration will primarily be based on the preference of the study participants. The survey will be completed by 1,515 respondents across the two study sites. Clearance is requested for three years.

Burden Statement: Burden in this context means the time expended by persons to generate, maintain, retain, disclose or provide the information requested. This includes the time needed to review instructions, to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information, to train personnel and to be able to respond to a collection of information, to search data sources, to complete and review the collection of information, and to transmit or otherwise disclose the information.

The total annual burden hours estimated for this ICR are summarized in the table below.

TOTAL ESTIMATED ANNUALIZED BURDEN—HOURS

Form name	Number of respondents	Number of responses per respondent	Average burden per response (in hours)	Total burden hours
24-month follow-up survey of impact study participants	505	1	30/60	252.5
Total				252.5

OS specifically requests comments on (1) the necessity and utility of the proposed information collection for the proper performance of the agency's functions, (2) the accuracy of the estimated burden, (3) ways to enhance the quality, utility, and clarity of the information to be collected, and (4) the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

Terry S. Clark,

Asst Information Collection Clearance Officer.

[FR Doc. 2016–20129 Filed 8–23–16; 8:45 am]

BILLING CODE 4168–11–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Secretary

[Document Identifier: HHS–OS–0990–New–30D]

Agency Information Collection Activities; Submission to OMB for Review and Approval; Public Comment Request

AGENCY: Office of the Secretary, HHS.

ACTION: Notice.

SUMMARY: In compliance with section 3507(a)(1)(D) of the Paperwork Reduction Act of 1995, the Office of the Secretary (OS), Department of Health and Human Services, has submitted an Information Collection Request (ICR), described below, to the Office of Management and Budget (OMB) for review and approval. The ICR is for a new collection. Comments submitted during the first public review of this ICR will be provided to OMB. OMB will accept further comments from the public on this ICR during the review and approval period.

DATES: Comments on the ICR must be received on or before September 23, 2016.

ADDRESSES: Submit your comments to *OIRA_submission@omb.eop.gov* or via facsimile to (202) 395–5806.

FOR FURTHER INFORMATION CONTACT: Information Collection Clearance staff, *Information.CollectionClearance@hhs.gov* or (202) 690–6162.

SUPPLEMENTARY INFORMATION: When submitting comments or requesting information, please include the Information Collection Request Title and document identifier HHS–OS–0990–New–30D for reference.

Information Collection Request Title: Office on Women's Health: IPV Provider Network Cross-Site Evaluation.

TOTAL ESTIMATED ANNUALIZED BURDEN—HOURS

Form name	Number of respondents	Number of responses per respondent	Average burden per response (in hours)	Total burden hours
Semi-annual online Service Provider Assessments	50	2	30/60	50
Key informant interviews	50	1	1	50
Total				100

Terry S. Clark,

Asst Information Collection Clearance Officer.

[FR Doc. 2016–20188 Filed 8–23–16; 8:45 am]

BILLING CODE 4150–33–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Secretary

[Document Identifier: HHS–OS–0990–0323–60D]

Agency Information Collection Activities; Proposed Collection; Public Comment Request

AGENCY: Office of the Secretary, HHS.

ACTION: Notice.

SUMMARY: In compliance with section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995, the Office of the Secretary (OS), Department of Health and Human Services, announces plans to submit an Information Collection Request (ICR), described below, to the Office of Management and Budget (OMB). The ICR is for extension of the approved information collection assigned OMB control number OS–0990–0323, which expires on January 31, 2017. Prior to submitting the ICR to OMB, OS seeks comments from the public regarding the burden estimate, below, or any other aspect of the ICR.

DATES: Comments on the ICR must be received on or before October 24, 2016.

ADDRESSES: Submit your comments to *Information.CollectionClearance@hhs.gov* or by calling (202) 690–6162.

FOR FURTHER INFORMATION CONTACT: Information Collection Clearance staff, *Information.CollectionClearance@hhs.gov* or (202) 690–6162.

SUPPLEMENTARY INFORMATION: When submitting comments or requesting information, please include the document identifier HHS–OS–0990–0323–60D for reference.

Information Collection Request Title: Medical Countermeasures.gov.

Abstract: In order to route product developers to the most appropriate personnel within the Department of Health and Human Services (HHS), HHS collects some basic information about the company's product through Medical Countermeasures.gov. Using this information and a routing system that has been developed with input from participating agencies within HHS, including the Office of the Assistant Secretary for Preparedness and Response (ASPR), the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), and the National Institutes of Health (NIH), Medical Countermeasures.gov routes the meeting request to the appropriate person within HHS. ASPR is requesting an extension by OMB for a three-year clearance.

Need and Proposed Use of the Information: Meeting Request Routing System for Medical Countermeasures.gov—OMB No. 0990–0323—Extension—Office of the Assistant Secretary for Preparedness and Response (ASPR), Office of the Biomedical Advanced Research and Development Authority (BARDA).

Likely Respondents: Medical Countermeasure Developers.

Burden Statement: Burden in this context means the time expended by persons to generate, maintain, retain, disclose or provide the information requested. This includes the time needed to review instructions, to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information, to train personnel and to be able to respond to a collection of information, to search data sources, to complete and review the collection of information, and to transmit or otherwise disclose the information. The total annual burden hours estimated for this ICR are summarized in the table below.

TOTAL ESTIMATED ANNUALIZED BURDEN—HOURS

Form name	Number of respondents	Number of responses per respondent	Average burden per response (in hours)	Total burden hours
Meeting Request	225	1	8/60	30
Total	225	1	8/60	30

OS specifically requests comments on (1) the necessity and utility of the proposed information collection for the proper performance of the agency's functions, (2) the accuracy of the estimated burden, (3) ways to enhance the quality, utility, and clarity of the information to be collected, and (4) the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

Terry S. Clark,

Asst Information Collection Clearance Officer.

[FR Doc. 2016–20158 Filed 8–23–16; 8:45 am]

BILLING CODE 4150–37–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Eunice Kennedy Shriver National Institute of Child Health & Human Development; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute of Child Health and Human Development Special Emphasis Panel, Developmental Mechanisms of Human Structural Birth Defects.

Date: September 20, 2016.

Time: 2:00 p.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Rockledge 6710B, 6710B Rockledge Drive, Bethesda, MD 20817, (Telephone Conference Call).

Contact Person: Sherry L Dupere, Ph.D., Chief, Scientific Review Branch, Scientific Review Branch, Eunice Kennedy Shriver National Institute of Child Health and Human Development, NIH, 6710 B Rockledge Drive, Room 2115, Bethesda, MD 20892–7510, 301–451–3415, *duperes@mail.nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.864, Population Research; 93.865, Research for Mothers and Children; 93.929, Center for Medical Rehabilitation Research; 93.209, Contraception and Infertility Loan Repayment Program, National Institutes of Health, HHS)

Dated: August 18, 2016.

Michelle Trout,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2016–20150 Filed 8–23–16; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Center For Scientific Review; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Center for Scientific Review Special Emphasis Panel; Shared and High-End Instrumentation: Crystallography and NMR.

Date: September 20, 2016.

Time: 8:00 a.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Telephone Conference Call).

Contact Person: Michael Eissenstat, Ph.D., Scientific Review Officer, BCMB IRG, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4166, Bethesda, MD 20892, 301–435–1722, *eissenstatma@csr.nih.gov.*

Name of Committee: Center for Scientific Review Special Emphasis Panel; Shared and High-End Instrumentation: Crystallography and NMR.

Date: September 20, 2016.

Time: 8:00 a.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, (Virtual Meeting).

Contact Person: Sudha Veeraraghavan, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, 301–435–1504, *sudha.veeraraghavan@nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.306, Comparative Medicine; 93.333, Clinical Research, 93.306, 93.333, 93.337, 93.393–93.396, 93.837–93.844, 93.846–93.878, 93.892, 93.893, National Institutes of Health, HHS)

Dated: August 17, 2016.

David Clary,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2016–20151 Filed 8–23–16; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: The invention listed below is owned by an agency of the U.S. Government and is available for licensing and/or co-development in the U.S. in accordance with 35 U.S.C. 209 and 37 CFR part 404 to achieve expeditious commercialization of results of federally-funded research and development. Foreign patent applications are filed on selected inventions to extend market coverage for companies and may also be available for licensing and/or co-development.

ADDRESSES: Invention Development and Marketing Unit, Technology Transfer Center, National Cancer Institute, 9609 Medical Center Drive, Mail Stop 9702, Rockville, MD 20850–9702.

FOR FURTHER INFORMATION CONTACT: Information on licensing and co-development research collaborations, and copies of the U.S. patent applications listed below may be obtained by contacting: Attn. Invention Development and Marketing Unit, Technology Transfer Center, National Cancer Institute, 9609 Medical Center Drive, Mail Stop 9702, Rockville, MD 20850–9702, Tel. 240–276–5515 or email *ncitechtransfer@mail.nih.gov.* A signed Confidential Disclosure Agreement may be required to receive copies of the patent applications.

SUPPLEMENTARY INFORMATION: Technology description follows.

Title of invention: Processes for Producing and Purifying Nucleic Acid-Containing Compositions.

Description of Technology: This technology consists of improved processes for producing and purifying nucleic acid-containing compositions, such as non-naturally occurring viruses, for example, recombinant polioviruses that can be used as oncolytic agents. Some of the improved processes relate to producing viral DNA templates and for chromatographic purification of nucleic acid-containing compositions, in which the nucleic acid is quantified in chromatography fractions with the rapid detection of one or more nucleic acid sequences (*e.g.,* using real time RT-qPCR detection). In addition, the invention includes improved processes for production and purification of oncolytic poliovirus, such as PVSRIPO. Compositions generated using these methods are also described.

Potential Commercial Applications:

- Large-scale manufacturing for producing highly purified, live virus.
- Improved viral purification process that:
  - ○ Increases the yield and/or purity of the resulting product, while decreasing the purification time;
  - ○ is generally applicable to purification of any nucleic acid molecule-containing composition, such as virus-based composition, and can be used for the purification of live native or recombinant viruses necessary for clinical applications.
- Improved process for generating viral template plasmid (such as one that includes a DNA template for an RNA virus), which addresses the problem of genetic instability of the plasmids containing the viral genome (*e.g.,* of a recombinant polio virus) in host (*e.g.,* bacterial) cells, in which the plasmids are typically propagated.

Value Proposition:

- Cost- and time-effective means of producing highly purified virus-based GMP products, such as oncolytic viruses, for regulatory approval.

Development Stage: Clinical Phase I.

Inventor(s): Trevor Broadt (NCI), Samir Shaban (NCI), Yueqing Xie (NCI), Jianwei Zhu (NCI), George Mitra (NCI).

Intellectual Property: HHS Ref. No. E–267–2014/0–US–01, corresponding to US Provisional Patent App. No. 62/173,777, filed June 10, 2015, entitled "Processes for Production and Purification of Nucleic Acid Containing Compositions.".

HHS Ref. No. E–267–2014/0–PCT–02, corresponding to International Patent App. No. PCT/US2016/036888, filed June 10, 2016, entitled "Processes for Production and Purification of Nucleic Acid Containing Compositions".

Publications: Ouellette *et al., BioProcessing J.* 2005 4(2):31–38.

Related Technologies: HHS Reference #E–240–2015/0 entitled "Methods of Analyzing Virus-Derived Therapeutics".

Contact Information: Requests for copies of the patent application or inquiries about licensing, research collaborations, and co-development opportunities should be sent to John D. Hewes, Ph.D., email: *john.hewes@nih.gov.*

Dated: August 16, 2016.

John D. Hewes,

Technology Transfer Specialist, Technology Transfer Center, National Cancer Institute.

[FR Doc. 2016–20160 Filed 8–23–16; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Interagency Coordinating Committee on the Validation of Alternative Methods Biennial Progress Report: 2014–2015; Availability of Report

SUMMARY: The National Toxicology Program (NTP) Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM) announces availability of the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) Biennial Progress Report: 2014–2015. This report, prepared in accordance with requirements of the ICCVAM Authorization Act of 2000 (42 U.S.C. 285*l*–3), describes activities and accomplishments from January 2014 through December 2015.

ADDRESSES: The report is available at *http://ntp.niehs.nih.gov/iccvamreport/2015/index.html.*

FOR FURTHER INFORMATION CONTACT: Dr. Warren Casey, Director, NICEATM; email: *warren.casey@nih.gov;* telephone: (919) 316–4729.

SUPPLEMENTARY INFORMATION:

Background: The ICCVAM Authorization Act of 2000 established ICCVAM as a permanent interagency committee of the National Institute of Environmental Health Sciences (NIEHS) under NICEATM. ICCVAM's mission is to facilitate development, validation, and regulatory acceptance of new and revised regulatory test methods that reduce, refine, or replace the use of animals in testing while maintaining and promoting scientific quality and the protection of human health, animal health, and the environment.

A provision of the ICCVAM Authorization Act states that ICCVAM shall prepare "reports to be made available to the public on its progress under this Act." The eighth ICCVAM progress report is now available, which describes ICCVAM activities and accomplishments from January 2014 through December 2015.

Summary of Report Contents: Key ICCVAM, ICCVAM agency, and NICEATM accomplishments summarized in the report include:

- A computational approach that integrates several types of data to predict human skin sensitization hazard without using animals (ICCVAM)
- A plan to adopt high throughput assays and computational models for detecting and measuring estrogen receptor bioactivity as an alternative for three Tier 1 tests currently used in the Endocrine Disruptor Screening Program to assess estrogen receptor activity (U.S. Environmental Protection Agency [EPA])
- Establishment of a Communities of Practice webinar seminar series discussing relevant topics (ICCVAM)
- Evaluation of acute oral and dermal toxicity data to determine if oral toxicity tests are sufficient to assign U.S. EPA dermal hazard classifications, eliminating the need for separate acute dermal toxicity tests (NICEATM)
- A series of workshops that drafted recommendations on use of an *in vitro* test with potential to replace animal use for pertussis vaccine testing (NICEATM, U.S. Food and Drug Administration, other ICCVAM agencies).

Availability of Report: The report is available at *http://ntp.niehs.nih.gov/iccvamreport/2015/index.html.* Links to this report and all past ICCVAM annual and biennial reports are available at *http://ntp.niehs.nih.gov/go/iccvam-bien.*

Background Information on ICCVAM and NICEATM: ICCVAM is an interagency committee composed of representatives from 15 federal regulatory and research agencies that require, use, generate, or disseminate toxicological and safety testing information. ICCVAM conducts technical evaluations of new, revised, and alternative safety testing methods and integrated testing strategies with regulatory applicability and promotes the scientific validation and regulatory acceptance of testing methods that more accurately assess the safety and hazards of chemicals and products and replace, reduce, or refine (enhance animal well-being and lessen or avoid pain and distress) animal use.

The ICCVAM Authorization Act of 2000 (42 U.S.C. 285*l*–3) establishes ICCVAM as a permanent interagency committee of NIEHS and provides the authority for ICCVAM involvement in activities relevant to the development of alternative test methods. ICCVAM acts to ensure that new and revised test methods are validated to meet the needs of federal agencies, increase the efficiency and effectiveness and federal agency test method review, and optimize utilization of scientific expertise outside the federal government. Additional information about ICCVAM can be found at *http://ntp.niehs.nih.gov/go/iccvam.*

NICEATM administers ICCVAM, provides scientific and operational support for ICCVAM-related activities, and conducts and publishes analyses and evaluations of data from new, revised, and alternative testing approaches. NICEATM and ICCVAM work collaboratively to evaluate new and improved testing approaches applicable to the needs of U.S. federal agencies. NICEATM and ICCVAM welcome the public nomination of new, revised, and alternative testing approaches for validation studies and technical evaluations. Additional information about NICEATM can be found at *http://ntp.niehs.nih.gov/go/niceatm.*

Dated: August 16, 2016.

John R. Bucher,

Associate Director, National Toxicology Program.

[FR Doc. 2016–20159 Filed 8–23–16; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: The invention listed below is owned by an agency of the U.S. Government and is available for licensing and/or co-development in the U.S. in accordance with 35 U.S.C. 209 and 37 CFR part 404 to achieve expeditious commercialization of results of federally-funded research and development. Foreign patent applications are filed on selected inventions to extend market coverage for companies and may also be available for licensing and/or co-development.

ADDRESSES: Invention Development and Marketing Unit, Technology Transfer Center, National Cancer Institute, 9609 Medical Center Drive, Mail Stop 9702, Rockville, MD 20850–9702.

FOR FURTHER INFORMATION CONTACT: Information on licensing and co-development research collaborations, and copies of the U.S. patent applications listed below may be obtained by contacting: Attn. Invention Development and Marketing Unit, Technology Transfer Center, National Cancer Institute, 9609 Medical Center Drive, Mail Stop 9702, Rockville, MD 20850–9702, Tel. 240–276–5515 or email *ncitechtransfer@mail.nih.gov.* A signed Confidential Disclosure Agreement may be required to receive copies of the patent applications.

SUPPLEMENTARY INFORMATION: Technology description follows.

Title of invention: Methods of Analyzing Virus-Derived Therapeutics.

Description of Technology: Researchers at the National Cancer Institute's Biopharmaceutical Development Program recently developed massively parallel sequencing methods for virus-derived therapeutics such as viral vaccines and oncolytic immunotherapies. The methods allow for the determination of micro-heterogeneity and quantitation of low frequency sequence variants, which have the possibility of supplanting monkey neurovirulence safety testing (MNVT), mutant analysis by PCR, and restriction enzyme cleavage (MAPREC) methods that are currently used to screen RNA virus-derived therapeutics.

Potential Commercial Applications:

- Improved methods for detecting mutations in GMP-manufactured virus-derived therapeutics, including viruses, viral template plasmids, or vaccines;
- The method allows for at least two different virus-derived therapeutics to be assayed simultaneously.

Value Proposition:

- Provides a cost- and time-effective means of assaying a virus-derived therapeutic, such as oncolytic viruses, for viral sequence variants, for regulatory approval;
- RNA virus preparation steps increase the amount of viral RNA obtained;
- Demonstrated superiority of massively parallel sequencing ("MPS") over mutant analysis by PCR and restriction enzyme cleavage ("MAPREC") analysis.

Development Stage: Clinical Phase I.

Inventor(s): Trevor Broadt (NCI), Michael D. Harwich (American International Biotechnology, LLC), William T. Budd (American International Biotechnology, LLC), Gregory A. Myers (American International Biotechnology, LLC).

Intellectual Property:

HHS Ref. No. E–240–2015/0–U.S.–01, corresponding to U.S. Provisional Patent App. No. 62/199,663, filed July 31, 201562/173,777, entitled "Methods of Analysis of RNA Virus-Derived Therapeutics"

HHS Ref. No. E–240–2015/0–PCT–02, corresponding to International Patent App. No. PCT/US2016/044788, filed July 29, 2016, entitled "Methods of Analyzing Virus-Derived Therapeutics"

Related Technologies: HHS Reference #E–267–2014/0 entitled "Processes for Production and Purification of Nucleic Acid Containing Compositions".

Contact Information: Requests for copies of the patent application or inquiries about licensing, research collaborations, and co-development opportunities should be sent to John D. Hewes, Ph.D., email: *john.hewes@nih.gov.*

Dated: August 16, 2016.

John D. Hewes,

Technology Transfer Specialist, Technology Transfer Center, National Cancer Institute.

[FR Doc. 2016–20162 Filed 8–23–16; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Substance Abuse and Mental Health Services Administration

Agency Information Collection Activities: Proposed Collection; Comment Request

In compliance with Section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995 concerning opportunity for public comment on proposed collections of information, the Substance Abuse and Mental Health Services Administration (SAMHSA) will publish periodic summaries of proposed projects. To request more information on the proposed projects or to obtain a copy of the information collection plans, call the SAMHSA Reports Clearance Officer on (240) 276–1243.

Comments are invited on: (a) Whether the proposed collections of information are necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Proposed Project: Voluntary Customer Satisfaction Surveys To Implement Executive Order 12862 in the Substance Abuse and Mental Health Services Administration (SAMHSA)—(OMB No. 0930–0197)—Extension

Executive Order 12862 directs agencies that "provide significant services directly to the public" to "survey customers to determine the kind and quality of services they want and their level of satisfaction with existing services." SAMHSA provides significant services directly to the public, including treatment providers and State substance abuse and mental health agencies, through a range of mechanisms, including publications, training, meetings, technical assistance and Web sites. Many of these services are focused on information dissemination activities. The purpose of this submission is to extend the existing generic approval for such surveys.

The primary use for information gathered is to identify strengths and weaknesses in current service provisions by SAMHSA and to make improvements that are practical and feasible. Several of the customer satisfaction surveys expected to be implemented under this approval will provide data for measurement of program effectiveness under the Government Performance and Results Act (GPRA). Information from these customer surveys will be used to plan and redirect resources and efforts to improve or maintain a high quality of service to health care providers and members of the public. Focus groups may be used to develop the survey questionnaire in some instances.

The estimated annual hour burden is as follows:

Type of data collection	Number of respondents	Responses/ respondent	Hours/ response	Total hours
Focus groups	250	1	2.50	625
Self-administered, mail, telephone and e-mail surveys	89,750	1	.250	22,438
Total	90,000			23,063

Send comments to Summer King, SAMHSA Reports Clearance Officer, 5600 Fishers Lane, Room 15E57–B, Rockville, Maryland 20857, *OR* email a copy to *summer.king@samhsa.hhs.gov*. Written comments should be received by October 24, 2016.

Summer King,

Statistician.

[FR Doc. 2016–20239 Filed 8–23–16; 8:45 am]

BILLING CODE 4162–20–P

DEPARTMENT OF HOMELAND SECURITY

U.S. Customs and Border Protection

[1651–0105]

Agency Information Collection Activities: Application To Use the Automated Commercial Environment (ACE)

AGENCY: U.S. Customs and Border Protection, Department of Homeland Security.

ACTION: 30-Day notice and request for comments; Extension and revision of an existing collection of information.

SUMMARY: U.S. Customs and Border Protection (CBP) of the Department of Homeland Security will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act: Application to Use the Automated Commercial Environment (ACE). CBP is proposing that this information collection be extended with a change to the burden hours resulting from the addition of a new application for brokers, importers, sureties, attorneys and other parties to establish an ACE Portal account to file protests. There are no proposed changes to the existing ACE Portal application for imported merchandise. This document is published to obtain comments from the public and affected agencies.

DATES: Written comments should be received on or before September 23, 2016 to be assured of consideration.

ADDRESSES: Interested persons are invited to submit written comments on this proposed information collection to the Office of Information and Regulatory Affairs, Office of Management and Budget. Comments should be addressed to the OMB Desk Officer for Customs and Border Protection, Department of Homeland Security, and sent via electronic mail to *oira_submission@omb.eop.gov* or faxed to (202) 395–5806.

FOR FURTHER INFORMATION CONTACT: Requests for additional information should be directed to Paperwork Reduction Act Officer, U.S. Customs and Border Protection, Regulations and Rulings, Office of Trade, 90 K Street NE., 10th Floor, Washington, DC 20229–1177, or via email (*CBP_PRA@cbp.dhs.gov*). Please note contact information provided here is solely for questions regarding this notice. Individuals seeking information about other CBP programs please contact the CBP National Customer Service Center at 877–227–5511, (TTY) 1–800–877–8339, or CBP Web site at *https://www.cbp.gov/*. For additional help: *https://help.cbp.gov/app/home/search/1*.

SUPPLEMENTARY INFORMATION: This proposed information collection was previously published in the **Federal Register** (81 FR 38727) on June 14, 2016, allowing for a 60-day comment period. This notice allows for an additional 30 days for public comments. This process is conducted in accordance with 5 CFR 1320.10. CBP invites the general public and other Federal agencies to comment on proposed and/or continuing information collections pursuant to the Paperwork Reduction Act of 1995 (Public Law 104–13; 44 U.S.C. 3507). The comments should address: (a) Whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimates of the burden of the collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; (d) ways to minimize the burden, including the use of automated collection techniques or the use of other forms of information technology; and (e) the annual costs to respondents or record keepers from the collection of information (total capital/startup costs and operations and maintenance costs). The comments that are submitted will be summarized and included in the CBP request for OMB approval. All comments will become a matter of public record. In this document, CBP is soliciting comments concerning the following information collection:

Title: Application to Use the Automated Commercial Environment (ACE).

OMB Number: 1651–0105.

Abstract: As of July 23, 2016, the Automated Commercial Environment (ACE) is the sole CBP-authorized electronic data interchange (EDI) system for processing electronic entry and entry summary filings of certain entry types. Pursuant to Executive Order 13659, a deadline of December 31, 2016, was established for participating Federal agencies to have capabilities, agreements, and other requirements in place to utilize the International Trade Data System (ITDS) and supporting systems, such as ACE, as the primary means of receiving from users the standard set of data and other relevant documentation (exclusive of applications for permits, licenses, or certifications) required for the release of imported cargo and clearance of cargo for export. *See* 79 FR 10655 (February 25, 2014). ACE supports government agencies and the trade community with border-related missions with respect to moving goods across the border efficiently and securely. Once ACE is fully implemented, all related CBP trade functions and the trade community will be supported from a single common user interface.

In order to establish an ACE Portal account, participants submit information such as their name, their employer identification number (EIN) or social security number, and if applicable, a statement certifying their capability to connect to the Internet. This information is submitted through the ACE Secure Data Portal which is accessible at: *http://www.cbp.gov/trade/automated.*

CBP is proposing to add the capability of electronically filing protests to ACE. A protest is a procedure whereby a private party may administratively challenge a CBP decision regarding imported merchandise and certain other CBP decisions. Trade members wishing to establish a protest filer account will need to submit the following data elements:

1. Organization Information
   a. Protest Filer Number (EIN, SSN, or CBP Assigned Number)
   b. Organization Name
   c. Organization Type
   d. End of Fiscal Year (month and day)
   e. Mailing Address
2. ACE Account Owner Information
   a. Name
   b. Date of Birth
   c. Email Address
   d. Telephone Number
   e. Fax Number (optional)
   f. Account Owner address if different from Company Address
3. Filing Notification Point of Contact
   a. Name
   b. Email address

Current Actions: CBP is proposing that this information collection be extended with a change to the burden hours resulting from the addition of a new application for protest filers to establish an ACE Portal account. There are no proposed changes to the existing ACE Portal application, or changes to the burden hours, for other ACE accounts.

Type of Review: Extension (with change).

Affected Public: Businesses.

Application to ACE (Import)

Estimated Number of Respondents: 21,100.

Estimated Number of Total Annual Responses: 21,100.

Estimated Time per Response: .33 hours.

Estimated Total Annual Burden Hours: 6,963.

Application to ACE (Export)

Estimated Number of Respondents: 9,000.

Estimated Number of Total Annual Responses: 9,000.

Estimated Time per Response: .066 hours.

Estimated Total Annual Burden Hours: 594.

Application to ACE (Protest)

Estimated Number of Respondents: 3,750.

Estimated Number of Total Annual Responses: 3,750.

Estimated Time per Response: .066 hours.

Estimated Total Annual Burden Hours: 248.

Dated: August 18, 2016.

Seth Renkema,

Branch Chief, Economic Impact Analysis Branch, U.S. Customs and Border Protection.

[FR Doc. 2016–20184 Filed 8–23–16; 8:45 am]

BILLING CODE 9111–14–P

DEPARTMENT OF THE INTERIOR

Geological Survey

[GX16RB00FXBRD00]

Agency Information Collection Activities: Request for Comments on the Assessing Public Views of Waterfowl-Related Topics To Inform the North American Waterfowl Management Plan

AGENCY: U.S. Geological Survey (USGS), Interior.

ACTION: Notice of a new information collection, Assessing Public Views of Waterfowl-Related Topics to Inform the North American Waterfowl Management Plan.

SUMMARY: We (the U.S. Geological Survey) are notifying the public that we have submitted to the Office of Management and Budget (OMB) the information collection request (ICR) described below. To comply with the Paperwork Reduction Act of 1995 (PRA) and as part of our continuing efforts to reduce paperwork and respondent burden, we invite the general public and other Federal agencies to take this opportunity to comment on this ICR.

DATES: To ensure that your comments on this ICR are considered, OMB must receive them on or before September 23, 2016.

ADDRESSES: Please submit written comments on this information collection directly to the Office of Management and Budget (OMB), Office of Information and Regulatory Affairs, Attention: Desk Officer for the Department of the Interior, via email: (*OIRA_SUBMISSION@omb.eop.gov*); or by fax (202) 395–5806; and identify your submission with 'OMB Control Number 1028–NEW Assessing Public Views of Waterfowl-Related Topics to Inform the North American Waterfowl Management Plan'. Please also forward a copy of your comments and suggestions on this information collection to the Information Collection Clearance Officer, U.S. Geological Survey, 12201 Sunrise Valley Drive MS 807, Reston, VA 20192 (mail); (703) 648–7195 (fax); or *gs-info_collections@usgs.gov* (email). Please reference 'OMB Information Collection 1028–NEW: Assessing Public Views of Waterfowl-Related Topics to Inform the North American Waterfowl Management Plan' in all correspondence.

FOR FURTHER INFORMATION CONTACT: Holly Miller, Fort Collins Science Center, U.S. Geological Survey, 2150 Centre Ave., Bldg. C, Fort Collins, CO 80526 (mail); 970–226–9133 (phone); or *millerh@usgs.gov* (email). You may also find information about this ICR at *www.reginfo.gov.*

SUPPLEMENTARY INFORMATION:

I. Abstract

The North American Waterfowl Management Plan (NAWMP) is an international agreement signed by the United States Secretary of the Interior, the Canadian Minister of the Environment, and the Mexican Secretary of the Environment and Natural Resources. NAWMP lays out a strategy to restore waterfowl populations in North America through habitat protection, restoration, and enhancement. The 2012 revised goals of

NAWMP focused for the first time on people as well as waterfowl and their habitats. Specifically, the plan states that "The needs and desires of people [as they relate to waterfowl] must be clearly understood and explicitly addressed" and calls for more human dimensions research with waterfowl hunters, viewers, and the general public. The plan recognizes the interconnectedness of waterfowl, their habitat, and stakeholders. Without human dimensions information, NAWMP objectives may not reflect stakeholder and societal values, and management and policy decisions may lead to actions that could be either irrelevant or counter to stakeholder and societal expectations.

To meet the goals set forth in the 2012 NAWMP revision, the NAWMP Human Dimensions Working Group has asked the USGS to conduct a mail survey to assess the general public's awareness and perceptions of waterfowl and wetlands, as well as measure participation in recreational activities, conservation behaviors, how people obtain information on nature-related issues, and demographics. Demographics voluntarily collected on the survey will include gender, education, income, and race/ethnicity. Additionally, a representative sample of names and mailing addresses from the general public will be purchased from a survey sampling company which uses publically available information to construct sample lists. To protect the confidentiality and privacy of survey respondents, the demographic information from the survey will not be associated with any respondent's name or mailing address at any time and will only be analyzed and reported in aggregate.

Demographic information collected on the survey will be used to understand if any segments of the American public hold differing views on waterfowl and waterfowl-related topics. For example, there may be differences in awareness and perceptions of waterfowl and wetlands or in participation in recreational activities between men and women. This will enable waterfowl managers and policymakers to better understand and be more responsive to the varied stakeholders they are serving. The data from the survey will be aggregated and statistically analyzed and the results will be published in publically available USGS reports.

The USGS Ecosystems Mission Area is conducting this effort as it aligns with their mission to "work with others to provide the scientific understanding and technologies needed to support the sound management and conservation of our Nation's biological resources." Specifically, the Ecosystems Mission Area "enters into partnerships with scientific collaborators to produce high-quality scientific information and partnerships with the users of scientific information to ensure this information's relevance and application to real problems."

II. Data

OMB Control Number: 1028–NEW.

Title: Assessing Public Views of Waterfowl-Related Topics to Inform the North American Waterfowl Management Plan.

Type of Request: Approval of new information collection.

Respondent Obligation: Voluntary.

Frequency of Collection: One time only.

Description of Respondents: General public.

Estimated Total Number of Annual Responses: 1,400.

Estimated Time per Response: We estimate that it will take 20 minutes per person to complete the full survey and 5 minutes per person to complete the non-response survey.

Estimated Annual Burden Hours: 366.

Estimated Reporting and Recordkeeping "Non-Hour Cost" Burden: There are no "non-hour cost" burdens associated with this collection of information.

Public Disclosure Statement: The PRA (44 U.S.C. 3501, *et seq.*) provides that an agency may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number. Until the OMB approves a collection of information, you are not obliged to respond.

Comments: On June 30, 2015, we published a **Federal Register** notice (80 FR 37292) announcing that we would submit this ICR to OMB for approval and soliciting comments. The comment period closed on August 31, 2015. We received no comments.

III. Request for Comments

We again invite comments concerning this ICR as to: (a) Whether the proposed collection of information is necessary for the agency to perform its duties, including whether the information is useful; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information; (c) how to enhance the quality, usefulness, and clarity of the information to be collected; and (d) how to minimize the burden on the respondents, including the use of automated collection techniques or other forms of information technology.

Please note that comments submitted in response to this notice are a matter of public record. Before including your personal mailing address, phone number, email address, or other personally identifiable information in your comment, you should be aware that your entire comment, including your personally identifiable information, may be made publicly available at any time. While you can ask the OMB in your comment to withhold your personal identifying information from public review, we cannot guarantee that it will be done.

Dated: August 16, 2016.

Rudy Schuster,

Fort Collins Science Center Director (Acting).

[FR Doc. 2016–19879 Filed 8–23–16; 8:45 am]

BILLING CODE P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[LLIDI00000.L10200000.PH0000 LXSS024D0000 241A 4500088890]

Notice of Public Meeting, Idaho Falls District Resource Advisory Council Meeting

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of public meetings.

SUMMARY: In accordance with the Federal Land Policy and Management Act (FLPMA) and the Federal Advisory Committee Act of 1972 (FACA), the U.S. Department of the Interior, Bureau of Land Management (BLM) Idaho Falls District Resource Advisory Council (RAC), will meet as indicated below.

DATES: The Idaho Falls District RAC will meet in Salmon, Idaho, September 20–21, 2016 for a two-day meeting. The first day will begin at 10:30 a.m. at the Public Lands Center, 1206 South Challis, Salmon, Idaho 83401. The second day will begin at same location starting at 8:00 a.m. adjourning at 1:30 p.m. Members of the public are invited to attend. All meetings are open to the public.

SUPPLEMENTARY INFORMATION: The first day will be held at the office beginning at 10:30 a.m. The agenda includes the following topics: a resource management plan (RMP) update and discussion on public collaboration in that process; discussion on the Western States Wolverine Conservation Project; the Salmon/Challis Vegetation Environmental Assessment Process; Sage-grouse Updates; Wilderness Planning Updates and; Pocatello Field Office's request for assistance as they work on the Blackfoot River Special Recreation Management Area.

On Wednesday, the group will depart the office at 8:00 a.m. to view Land and Water Conservation Fund (LWCF) parcels. Following that stop the group will head to Lemhi Pass/Agency Creek area where they will look at the site location for a possible new cabin along the Continental Divide Trail. While on the Pass, local archaeologist will provide background on the Lemhi Pass National Historic Landmark. The group will have lunch in the field before departing for home around 1:30 p.m.

The 15-member Council advises the Secretary of the Interior, through the Bureau of Land Management, on a variety of planning and management issues associated with public land management in the BLM Idaho Falls District (IFD), which covers eastern Idaho.

All meetings are open to the public. The public may present written comments to the Council. Each formal Council meeting will also have time allocated for hearing public comments. Depending on the number of persons wishing to comment and time available, the time for individual oral comments may be limited. The IFD RAC will hear public comment from 10:30–11:00 a.m. on September 20. Individuals who plan to attend and need special assistance, such as sign language interpretation, tour transportation or other reasonable accommodations, should contact the BLM as provided below.

FOR FURTHER INFORMATION CONTACT: Sarah Wheeler, RAC Coordinator, Idaho Falls District, 1405 Hollipark Dr., Idaho Falls, ID 83401. Telephone: (208) 524–7550. Email: *sawheeler@blm.gov.*

Dated: August 15, 2016.

Sarah Wheeler,

Resource Advisory Council Coordinator, Idaho Falls District.

[FR Doc. 2016–20228 Filed 8–23–16; 8:45 am]

BILLING CODE 4310–GG–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337–TA–991]

Certain Nanopores and Products Containing Same Commission Determination Not To Review an Initial Determination Terminating the Investigation Based Upon Consent Order Stipulation and Proposed Consent Order; Issuance of Consent Order; Termination of the Investigation

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined not to review an initial determination ("ID") (Order No. 13) granting a joint motion to terminate the investigation based upon a consent order stipulation and proposed consent order. The Commission has issued the consent order. The investigation is terminated.

FOR FURTHER INFORMATION CONTACT: Lucy Grace D. Noyola, Office of the General Counsel, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436, telephone 202–205–3438. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436, telephone 202–205–2000. General information concerning the Commission may also be obtained by accessing its Internet server (*https://www.usitc.gov*). The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at *https://edis.usitc.gov.* Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202–205–1810.

SUPPLEMENTARY INFORMATION: The Commission instituted this investigation on March 31, 2016, based on a complaint filed by Illumina, Inc. of San Diego, California; University of Washington of Seattle, Washington; and UAB Research Foundation of Birmingham, Alabama (collectively, "Complainants"). 81 FR 18648 (Mar. 31, 2016). The complaint, as supplemented, alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain nanopores and products containing same by reason of infringement of certain claims of U.S. Patent Nos. 8,673,550 and 9,170,230. *Id.* The notice of investigation names as a respondents Oxford Nanopore Technologies Ltd. of Oxford, United Kingdom and Oxford Nanopore Technologies, Inc. of Cambridge, Massachusetts (collectively, "Respondents"). *Id.* The Office of Unfair Import Investigations ("OUII") also was named as a party to the investigation. *Id.*

On July 5, 2016, Complainants and Respondents filed a joint motion to terminate the investigation based upon a consent order stipulation and proposed consent order. On July 12, 2016, OUII filed a response, supporting the motion.

On July 26, 2016, the presiding administrative law judge ("ALJ") issued an ID (Order No. 13) granting the motion. The ALJ found that the consent order stipulation and proposed consent order contain the statements required by 19 CFR 210.21(c). The ALJ also found that termination of the investigation was in the public interest. No petitions for review of the ID were filed.

The Commission has determined not to review the subject ID and has issued the consent order. The investigation is terminated.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. 1337), and in Part 210 of the Commission's Rules of Practice and Procedure (19 CFR part 210).

By order of the Commission.

Issued: August 18, 2016.

Lisa R. Barton,

Secretary to the Commission.

[FR Doc. 2016–20199 Filed 8–23–16; 8:45 am]

BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337–TA–1009]

Certain Inflatable Products With Tensioning Structures and Processes for Making the Same; Commission Determination Not To Review an Initial Determination Terminating the Investigation Based on a Consent Order Stipulation and Proposed Consent Order; Issuance of Consent Order; Termination of the Investigation

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined not to review an initial determination ("ID") (Order No. 6) of the presiding administrative law judge ("ALJ") terminating the above-captioned investigation based upon a consent order stipulation and proposed consent order. The Commission has also determined to issue a consent order.

FOR FURTHER INFORMATION CONTACT: Robert Needham, Office of the General Counsel, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436, telephone (202) 708–5468. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436, telephone (202) 205–2000. General information concerning the Commission may also be obtained by accessing its Internet server at *https://www.usitc.gov*. The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at *https://edis.usitc.gov*. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205–1810.

SUPPLEMENTARY INFORMATION: The Commission instituted this investigation on June 24, 2016, based on a complaint filed by Intex Recreation Corp. of Long Beach, California; and Intex Marketing Ltd. of Tortola, British Virgin Islands (together, "Intex"). 81 *FR* 41346–47. The complaint alleges that respondents Bestway (USA), Inc., of Phoenix, Arizona; Bestway Global Holdings, Inc. of Shanghai, China; Bestway (Hong Kong) International Ltd. of Hong Kong; Bestway Inflatables & Materials Corporation of Shanghai, China; and Bestway (Nantong) Recreation Corp. of Nantong, China (together, "Bestway"), are in violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, by reason of infringement of certain claims of U.S. Patent Nos. 8,562,773 and 9,156,203. *Id.* The Office of Unfair Import Investigations ("OUII") is a party to the investigation. *Id.* at 41347.

On July 14, 2016, Bestway filed a motion to terminate the investigation based upon a consent order stipulation and proposed consent order. That same day, OUII filed a response arguing that the motion should be granted because it complies with the Commission Rules for consent orders and termination serves the public interest. Intex did not respond to the motion.

On July 25, 2016, the ALJ granted the motion in the subject ID. She found that the motion for termination by consent order stipulation complies with the requirements of Commission Rule 210.21(c) and is in the public interest. No petitions for review of the ID were received.

The Commission has determined not to review the subject ID and to issue a consent order. The investigation is terminated in its entirety.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, and in Part 210 of the Commission's Rules of Practice and Procedure, 19 CFR part 210.

By order of the Commission.

Issued: August 18, 2016.

Lisa R. Barton,

Secretary to the Commission.

[FR Doc. 2016–20200 Filed 8–23–16; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[Docket No. DEA–392]

Bulk Manufacturer of Controlled Substances Application: Chattem Chemicals

ACTION: Notice of application.

DATES: Registered bulk manufacturers of the affected basic classes, and applicants therefore, may file written comments on or objections to the issuance of the proposed registration in accordance with 21 CFR 1301.33(a) on or before October 24, 2016.

ADDRESSES: Written comments should be sent to: Drug Enforcement Administration, Attention: DEA Federal Register Representative/ODW, 8701 Morrissette Drive, Springfield, Virginia 22152.

SUPPLEMENTARY INFORMATION:

The Attorney General has delegated her authority under the Controlled Substances Act to the Administrator of the Drug Enforcement Administration (DEA), 28 CFR 0.100(b). Authority to exercise all necessary functions with respect to the promulgation and implementation of 21 CFR part 1301, incident to the registration of manufacturers, distributors, dispensers, importers, and exporters of controlled substances (other than final orders in connection with suspension, denial, or revocation of registration) has been redelegated to the Deputy Assistant Administrator of the DEA Office of Diversion Control ("Deputy Assistant Administrator") pursuant to section 7 of 28 CFR part 0, appendix to subpart R.

In accordance with 21 CFR 1301.33(a), this is notice that on July 27, 2016, Chattem Chemicals, 3801 St. Elmo Avenue, Chattanooga, Tennessee 37409 applied to be registered as a bulk manufacturer of the following basic classes of controlled substances:

Controlled substance	Schedule
Gamma Hydroxybutyric Acid (2010).	I
4-Methoxyamphetamine (7411) ...	I
Dihydromorphine (9145)	I
Amphetamine (1100)	II
Methamphetamine (1105)	II
Lisdexamfetamine (1205)	II
Methylphenidate (1724)	II
Pentobarbital (2270)	II
Codeine (9050)	II
Dihydrocodeine (9120)	II
Oxycodone (9143)	II
Hydromorphone (9150)	II
Hydrocodone (9193)	II
Meperidine (9230)	II
Meperidine intermediate–A (9232)	II
Meperidine intermediate–B (9233)	II
Meperidine intermediate–C (9234)	II
Methadone (9250)	II
Methadone intermediate (9254) ...	II
Morphine (9300)	II
Oripavine (9330)	II
Thebaine (9333)	II
Opium tincture (9630)	II
Opium, powdered (9639)	II
Opium, granulated (9640)	II
Oxymorphone (9652)	II
Noroxymorphone (9668)	II
Alfentanil (9737)	II
Remifentanil (9739)	II
Sufentanil (9740)	II
Tapentadol (9780)	II
Fentanyl (9801)	II

The company plans to manufacture the listed controlled substances in bulk for distribution and sale to its customers.

Louis J. Milione,

Deputy Assistant Administrator.

[FR Doc. 2016–20241 Filed 8–23–16; 8:45 am]

BILLING CODE 4410–09–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[Docket No. DEA–392]

Importer of Controlled Substances Application: Noramco, Inc.

ACTION: Notice of application.

DATES: Registered bulk manufacturers of the affected basic classes, and applicants therefore, may file written comments on or objections to the issuance of the proposed registration in accordance with 21 CFR 1301.34(a) on or before September 23, 2016. Such persons may also file a written request for a hearing on the application pursuant to 21 CFR 1301.43 on or before September 23, 2016.

ADDRESSES: Written comments should be sent to: Drug Enforcement Administration, Attention: DEA Federal Register Representative/ODW, 8701 Morrissette Drive, Springfield, Virginia 22152. All requests for hearing must be sent to: Drug Enforcement

Administration, Attn: Administrator, 8701 Morrissette Drive, Springfield, Virginia 22152. All requests for hearing should also be sent to: (1) Drug Enforcement Administration, Attn: Hearing Clerk/LJ, 8701 Morrissette Drive, Springfield, Virginia 22152; and (2) Drug Enforcement Administration, Attn: DEA Federal Register Representative/ODW, 8701 Morrissette Drive, Springfield, Virginia 22152. Comments and request for hearings on applications to import narcotic raw material are not appropriate. 72 FR 3417 (January 25, 2007).

SUPPLEMENTARY INFORMATION: The Attorney General has delegated her authority under the Controlled Substances Act to the Administrator of the Drug Enforcement Administration (DEA), 28 CFR 0.100(b). Authority to exercise all necessary functions with respect to the promulgation and implementation of 21 CFR part 1301, incident to the registration of manufacturers, distributors, dispensers, importers, and exporters of controlled substances (other than final orders in connection with suspension, denial, or revocation of registration) has been redelegated to the Deputy Assistant Administrator of the DEA Office of Diversion Control ("Deputy Assistant Administrator") pursuant to section 7 of 28 CFR part 0, appendix to subpart R.

In accordance with 21 CFR 1301.34(a), this is notice that on July 12, 2016, Noramco, Inc., 500 Swedes Landing Road, Wilmington, Delaware 19801–4417 applied to be registered as an importer of the following basic classes of controlled substances:

Controlled substance	Schedule
Phenylacetone (8501)	II
Opium, raw (9600)	II
Poppy Straw Concentrate (9670)	II
Tapentadol (9780)	II

The company plans to import phenylacetone (8501), opium, raw (9600), and poppy straw concentrate (9670) to bulk manufacture other controlled substances for distribution to its customers. The company plans to import an intermediate form of tapentadol (9780) to bulk manufacture tapentadol (9780) for distribution to its customers

Louis J. Milione,

Deputy Assistant Administrator.

[FR Doc. 2016–20238 Filed 8–23–16; 8:45 am]

BILLING CODE 4410–09–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[Docket No. DEA–392]

Importer of Controlled Substances Application: Cerilliant Corporation

ACTION: Notice of application.

DATES: Registered bulk manufacturers of the affected basic classes, and applicants therefore, may file written comments on or objections to the issuance of the proposed registration in accordance with 21 CFR 1301.34(a) on or before September 23, 2016. Such persons may also file a written request for a hearing on the application pursuant to 21 CFR 1301.43 on or before September 23, 2016.

ADDRESSES: Written comments should be sent to: Drug Enforcement Administration, Attention: DEA Federal Register Representative/ODW, 8701 Morrissette Drive, Springfield, Virginia 22152. All requests for hearing must be sent to: Drug Enforcement Administration, Attn: Administrator, 8701 Morrissette Drive, Springfield, Virginia 22152. All requests for hearing should also be sent to: (1) Drug Enforcement Administration, Attn: Hearing Clerk/LJ, 8701 Morrissette Drive, Springfield, Virginia 22152; and (2) Drug Enforcement Administration, Attn: DEA Federal Register Representative/ODW, 8701 Morrissette Drive, Springfield, Virginia 22152. Comments and requests for hearing on applications to import narcotic raw material are not appropriate. 72 FR 3417, (January 25, 2007).

SUPPLEMENTARY INFORMATION: The Attorney General has delegated her authority under the Controlled Substances Act to the Administrator of the Drug Enforcement Administration (DEA), 28 CFR 0.100(b). Authority to exercise all necessary functions with respect to the promulgation and implementation of 21 CFR part 1301, incident to the registration of manufacturers, distributors, dispensers, importers, and exporters of controlled substances (other than final orders in connection with suspension, denial, or revocation of registration) has been redelegated to the Deputy Assistant Administrator of the DEA Office of Diversion Control ("Deputy Assistant Administrator") pursuant to section 7 of 28 CFR part 0, appendix to subpart R.

In accordance with 21 CFR 1301.34(a), this is notice that on July 7, 2016, Cerilliant Corporation, 811 Paloma Drive, Suite A, Round Rock, Texas 78665–2402 applied to be registered as an importer of the following basic classes of controlled substances:

Controlled substance	Schedule
3-Fluoro-N-methylcathinone (3-FMC) (1233)	I
Cathinone (1235)	I
Methcathinone (1237)	I
4-Fluoro-N-methylcathinone (4-FMC) (1238)	I
Pentedrone (*a*-methylaminovalerophenone) (1246)	I
Mephedrone (4-Methyl-N-methylcathinone) (1248)	I
4-Methyl-N-ethylcathinone (4-MEC) (1249)	I
Naphyrone (1258)	I
N-Ethylamphetamine (1475)	I
N,N-Dimethylamphetamine (1480)	I
Fenethylline (1503)	I
Methaqualone (2565)	I
JWH-250 (1-Pentyl-3-(2-methoxyphenylacetyl) indole) (6250)	I
SR-18 (Also known as RCS-8) (1-Cyclohexylethyl-3-(2-methoxyphenylacetyl) indole) (7008)	I
5-Flouro-UR-144 and XLR11[1-(5-Fluoro-pentyl)1H-indol-3-yl](2,2,3,3-tertamethylcyclopropyl)methanone (7011)	I
AB-FUBINACA (N-(1-amino-3-methyl-1-oxobutan-2-yl)-1-(4-fluorobenzyl)-1H-indazole-3-carboxamide) (7012)	I
JWH-019 (1-Hexyl-3-(1-naphthoyl)indole) (7019)	I
AB-PINACA (N-(1-amino-3-methyl-1-oxobutan-2-yl)-1-pentyl-1H-indazole-3-carboxamide) (7023)	I
THJ-2201 [1-(5-fluoropentyl)-1H-indazol-3-yl](naphthalen-1-yl)methanone (7024)	I
AB-CHIMINACA (N-(1-amino-3-methyl-1-oxobutan-2-yl)-1-(cyclohenxylmethyl)-1H-indazole-3-carboxamide (7031)	I
ADB-PINACA (N-(1-amino-3,3-dimethyl-1-oxobutan-2-yl)-1-pentyl-1H-indazole-3-carboxamide) (7035)	I

Controlled substance	Schedule
APINACA and AKB48 N-(1-Adamantyl)-1-pentyl-1H-indazole-3-carboxamide (7048)	I
JWH-081 (1-Pentyl-3-(1-(4-methoxynaphthoyl) indole) (7081)	I
SR-19 (Also known as RCS-4) (1-Pentyl-3-[(4-methoxy)-benzoyl] indole (7104)	I
JWH-018 (also known as AM678) (1-Pentyl-3-(1-naphthoyl)indole) (7118)	I
JWH-122 (1-Pentyl-3-(4-methyl-1-naphthoyl) indole) (7122)	I
UR-144 (1-pentyl-1H-indol-3-yl)(2,2,3,3-tetramethylcyclopropyl) methanone (7144)	I
JWH-073 (1-Butyl-3-(1-naphthoyl)indole) (7173)	I
JWH-200 (1-[2-(4-Morpholinyl)ethyl]-3-(1-naphthoyl) indole) (7200)	I
AM2201 (1-(5-Fluoropentyl)-3-(1-naphthoyl) indole) (7201)	I
JWH-203 (1-Pentyl-3-(2-chlorophenylacetyl) indole) (7203)	I
PB-22 (Quinolin-8-yl 1-pentyl-1H-indole-3-carboxylate) (7222)	I
5F-PB-22 (Quinolin-8-yl 1-(5-fluoropentyl)-1H-indole-3-carboxylate) (7225)	I
Alpha-ethyltryptamine (7249)	I
Ibogaine (7260)	I
CP-47,497 (5-(1,1-Dimethylheptyl)-2-[(1R,3S)3-hydroxycyclohexyl-phenol) (7297)	I
CP-47,497 C8 Homologue (5-(1,1-Dimethyloctyl)-2-[(1R,3S)3-hydroxycyclohexyl-phenol) (7298)	I
Lysergic acid diethylamide (7315)	I
2,5-Dimethoxy-4-(n)-propylthiophenethylamine(2C-T-7) (7348)	I
Marihuana (7360)	I
Parahexyl (7374)	I
Mescaline (7381)	I
2-(4-Ethylthio-2,5-dimethoxyphenyl) ethanamine(2C-T-2) (7385)	I
3,4,5-Trimethoxyamphetamine (7390)	I
4-Bromo-2,5-dimethoxyamphetamine (7391)	I
4-Bromo-2,5-dimethoxyphenethylamine (7392)	I
4-Methyl-2,5-dimethoxyamphetamine (7395)	I
2,5-Dimethoxyamphetamine (7396)	I
JWH-398 (1-Pentyl-3-(4-chloro-1-naphthoyl) indole (7398)	I
3,4-Methylenedioxyamphetamine (7400)	I
5-Methoxy-3,4-methylenedioxyamphetamine (7401)	I
N-Hydroxy-3,4-methylendioxyamphetamine (7402)	I
3,4-Methylenedioxy-N-ethylamphetamine (7404)	I
3,4-Methylenedioxymethamphetamine (7405)	I
4-Methoxyamphetamine (7411)	I
5-Methoxy-N-N-dimethyltryptamine (7431)	I
Alpha-methyltryptamine (7432)	I
Bufotenine (7433)	I
Diethyltryptamine (7434)	I
Dimethyltryptamine (7435)	I
Psilocybin (7437)	I
Psilocyn (7438)	I
5-Methoxy-N,N-diisopropyltryptamine (7439)	I
N-Ethyl-1-phenylcyclohexylamine (7455)	I
1-(1-Phenylcyclohexyl)pyrrolidine (7458)	I
1-[1-(2-Thienyl)cyclohexyl]piperidine (7470)	I
N-Benzylpiperazine (7493)	I
4-Methyl-alphapyrrolidinopropiophenone (4-MePPP) (7498)	I
2-(2,5-Dimethoxy-4-methylphenyl) ethanamine (2C-D) (7508)	I
2-(2,5-Dimethoxy-4-ethylphenyl) ethanamine(2C-E) (7509)	I
2-(2,5-Dimethoxyphenyl) ethanamine(2C-H) (7517)	I
2-(4-Iodo-2,5-dimethoxyphenyl) ethanamine (2C-I) (7518)	I
2-(4-Chloro-2,5-dimethoxyphenyl) ethanamine (2C-C) (7519)	I
2-(2,5-Dimethoxy-4-nitro-phenyl) ethanamine(2C-N) (7521)	I
2-(2,5-Dimethoxy-4-(n)-propylphenyl) ethanamine (2C-P) (7524)	I
2-(4-Isopropylthio)-2,5-dimethoxyphenyl) ethanamine(2C-T-4) (7532)	I
MDPV (3,4-Methylenedioxypyrovalerone) (7535)	I
2-(4-bromo-2,5-dimethoxyphenyl)-N-(2-methoxybenzyl)ethanamine (25B-NBOMe) (7536)	I
2-(4-chloro-2,5-dimethoxyphenyl)-N-(2-methoxybenzyl)ethanamine (25C-NBOMe) (7537)	I
2-(4-iodo-2,5-dimethoxyphenyl)-N-(2-methoxybenzyl)ethanamine (25I-NBOMe) (7538)	I
Methylone (3,4-Methylenedioxy-N-methylcathinone)(7540)	I
Butylone (7541)	I
Pentylone (7542)	I
alpha-pyrrolidinopentiophenone (*a*-PVP) (7545)	I
alpha-pyrrolidinobutiophenone (*a*-PBP) (7546)	I
AM-694 (1-(5-Fluoropentyl)-3-(2-iodobenzoyl) Indole) (7694)	I
Desomorphine (9055)	I
Etorphine (except HCl) (9056)	I
Codeine methylbromide (9070)	I
Heroin (9200)	I
Morphine-N-oxide (9307)	I
Normorphine (9313)	I
Pholcodine (9314)	I
AH-7921 (3,4-dichioro-N-[(1-dimethylamino)cyclohexymethyl]benzamide (9551)	I
Acetylmethadol (9601)	I

Controlled substance	Schedule
Allylprodine (9602)	I
Alphacetylmethadol except levo-alphacetylmethadol (9603)	I
Alphameprodine (9604)	I
Alphamethadol (9605)	I
Betacetylmethadol (9607)	I
Betameprodine (9608)	I
Betamethadol (9609)	I
Betaprodine (9611)	I
Dextromoramide (9613)	I
Dipipanone (9622)	I
Hydroxypethidine (9627)	I
Noracymethadol (9633)	I
Norlevorphanol (9634)	I
Normethadone (9635)	I
Racemoramide (9645)	I
Trimeperidine (9646)	I
1-Methyl-4-phenyl-4-propionoxypiperidine (9661)	I
Tilidine (9750)	I
Para-Fluorofentanyl (9812)	I
3-Methylfentanyl (9813)	I
Alpha-methylfentanyl (9814)	I
Acetyl-alpha-methylfentanyl (9815)	I
Beta-hydroxyfentanyl (9830)	I
Beta-hydroxy-3-methylfentanyl (9831)	I
Alpha-methylthiofentanyl (9832)	I
3-Methylthiofentanyl (9833)	I
Thiofentanyl (9835)	I
Methamphetamine (1105)	II
Methylphenidate (1724)	II
Amobarbital (2125)	II
Pentobarbital (2270)	II
Secobarbital (2315)	II
Glutethimide (2550)	II
Nabilone (7379)	II
1-Phenylcyclohexylamine (7460)	II
Phencyclidine (7471)	II
Phenylacetone (8501)	II
1-Piperidinocyclohexanecarbonitrile (8603)	II
Alphaprodine (9010)	II
Dihydrocodeine (9120)	II
Ecgonine (9180)	II
Ethylmorphine (9190)	II
Levomethorphan (9210)	II
Levorphanol (9220)	II
Meperidine (9230)	II
Dextropropoxyphene, bulk (non-dosage forms) (9273)	II
Levo-alphacetylmethadol (9648)	II
Noroxymorphone (9668)	II
Racemethorphan (9732)	II
Alfentanil (9737)	II
Remifentanil (9739)	II
Sufentanil (9740)	II
Carfentanil (9743)	II
Tapentadol (9780)	II

The company plans to import small quantities of the listed controlled substances for the manufacture of analytical reference standards and distribution to their research and forensic customers. Placement of these drug codes onto the company's registration does not translate into automatic approval of subsequent permit applications to import controlled substances.

In reference to drug code 7360 (Marihuana) the company plans to import a synthetic cannabidiol. No other activity for this drug code is authorized for this registration.

Louis J. Milione,

Deputy Assistant Administrator.

[FR Doc. 2016–20237 Filed 8–23–16; 8:45 am]

BILLING CODE 4410–09–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[Docket No. DEA–392]

Importer of Controlled Substances Application: Akorn, Inc.

ACTION: Notice of application.

DATES: Registered bulk manufacturers of the affected basic class, and applicants therefore, may file written comments on or objections to the issuance of the proposed registration in accordance with 21 CFR 1301.34(a) on or before September 23, 2016. Such persons may also file a written request for a hearing on the application pursuant to 21 CFR 1301.43 on or before September 23, 2016.

ADDRESSES: Written comments should be sent to: Drug Enforcement Administration, Attention: DEA **Federal Register** Representative/ODW, 8701 Morrissette Drive, Springfield, Virginia 22152. All requests for hearing must be sent to: Drug Enforcement Administration, Attn: Administrator, 8701 Morrissette Drive, Springfield, Virginia 22152. All requests for hearing should also be sent to: (1) Drug Enforcement Administration, Attn: Hearing Clerk/LJ, 8701 Morrissette Drive, Springfield, Virginia 22152; and (2) Drug Enforcement Administration, Attn: DEA **Federal Register** Representative/ODW, 8701 Morrissette Drive, Springfield, Virginia 22152.

SUPPLEMENTARY INFORMATION:

The Attorney General has delegated her authority under the Controlled Substances Act to the Administrator of the Drug Enforcement Administration (DEA), 28 CFR 0.100(b). Authority to exercise all necessary functions with respect to the promulgation and implementation of 21 CFR part 1301, incident to the registration of manufacturers, distributors, dispensers, importers, and exporters of controlled substances (other than final orders in connection with suspension, denial, or revocation of registration) has been redelegated to the Deputy Assistant Administrator of the DEA Office of Diversion Control (“Deputy Assistant Administrator”) pursuant to section 7 of 28 CFR part 0, appendix to subpart R.

In accordance with 21 CFR 1301.34(a), this is notice that on June 3, 2016, Akorn, Inc., 1222 W. Grand Avenue, Decatur, Illinois 62522 applied to be registered as an importer of remifentanil (9739), a basic class of controlled substances listed in schedule II.

The company plans to import remifentanil in dosage form for distribution.

Louis J. Milione,

Deputy Assistant Administrator.

[FR Doc. 2016–20236 Filed 8–23–16; 8:45 am]

BILLING CODE 4410–09–P

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

[Docket No. DEA–392]

Bulk Manufacturer of Controlled Substances Application: Noramco, Inc.

ACTION: Notice of application.

DATES: Registered bulk manufacturers of the affected basic classes, and applicants therefore, may file written comments on or objections to the issuance of the proposed registration in accordance with 21 CFR 1301.33(a) on or before October 24, 2016.

ADDRESSES: Written comments should be sent to: Drug Enforcement Administration, Attention: DEA Federal Register Representative/ODW, 8701 Morrissette Drive, Springfield, Virginia 22152.

SUPPLEMENTARY INFORMATION: The Attorney General has delegated her authority under the Controlled Substances Act to the Administrator of the Drug Enforcement Administration (DEA), 28 CFR 0.100(b). Authority to exercise all necessary functions with respect to the promulgation and implementation of 21 CFR part 1301, incident to the registration of manufacturers, distributors, dispensers, importers, and exporters of controlled substances (other than final orders in connection with suspension, denial, or revocation of registration) has been redelegated to the Deputy Assistant Administrator of the DEA Office of Diversion Control (“Deputy Assistant Administrator”) pursuant to section 7 of 28 CFR part 0, appendix to subpart R.

In accordance with 21 CFR 1301.33(a), this is notice that on July 20, 2016, Noramco, Inc., 1440 Olympic Drive, Athens, Georgia 30601 applied to be registered as a bulk manufacturer the following basic classes of controlled substances:

Controlled substance	Schedule
Marihuana (7360)	I
Tetrahydrocannabinols (7370)	I
Hydromorphinol (9301)	I
Nabilone (7379)	II

The company plans to manufacture bulk active pharmaceutical ingredients (APIs) and reference standards for distribution to their customers.

In reference to drug codes 7360 (marihuana) and 7370 (tetrahydrocannabinols), the company plans to bulk manufacturer these drugs as synthetic. No other activities for these drug codes are authorized for this registration.

Louis J. Milione,

Deputy Assistant Administrator.

[FR Doc. 2016–20235 Filed 8–23–16; 8:45 am]

BILLING CODE 4410–09–P

DEPARTMENT OF JUSTICE

Notice of Lodging of Proposed Consent Decree Under the Clean Air Act

On August 18, 2016, the Department of Justice lodged a proposed Consent Decree with the United States District Court for the District of Columbia in the lawsuit entitled *United States* v. *Harley-Davidson, Inc., et al.,* Civil Action No. 1:16–cv–01687.

The United States’ Complaint alleges that Harley-Davidson, Inc. (and three related companies) manufactured and sold over 339,392 after-market devices (known as “Super Tuners” and used with Harley-Davidson motorcycles) in violation of the Clean Air Act prohibition on the manufacture or sale of devices that defeat the functioning of the motorcycle’s certified emissions control system. The Complaint also alleges, relatedly, that Defendants violated the provision of the Act that prohibits any person from removing or rendering inoperative a motor vehicle’s certified emissions control system and from causing such “tampering.” Finally, the Complaint alleges that Defendants manufactured and sold more than 12,000 motorcycles from model years 2006, 2007 and 2008 that were not certified by EPA as required by the Clean Air Act.

The Consent Decree requires Defendants to stop selling the illegal tuners in the United States by August 23, 2016. Defendants will also offer to buy back all such tuners in stock at Harley-Davidson dealerships across the country and destroy them. The Decree requires Defendants to obtain an Executive order from the California Air Resources Board (CARB) for any tuners it sells in the United States in the future. These Executive orders (E.O.s) will demonstrate that the CARB-certified tuners do not cause Defendants’ motorcycles to exceed the EPA-certified emissions limits. Defendants must also conduct tests on motorcycles that have been tuned with the E.O.-certified tuners and provide the results to EPA to ensure that their motorcycles remain in compliance with EPA emissions requirements. In addition, for any uncertified Super Tuners that Defendants sell outside the United

States in the future, they must label them as not for use in the United States.

Under the Consent Decree, Defendants must also ensure that all of their future motorcycle models intended for sale in the United States are certified by EPA.

Finally, Defendants will pay a civil penalty of $12 million and spend $3 million implementing a project to mitigate excess hydrocarbon emissions by replacing conventional woodstoves with cleaner-burning stoves.

The publication of this notice opens a period for public comment on the Consent Decree. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and should refer to *United States* v. *Harley-Davidson, Inc., et al.,* D.J. Ref. No. 90–5–2–1–11333. All comments must be submitted no later than thirty (30) days after the publication date of this notice. Comments may be submitted either by email or by mail:

To submit comments:	*Send them to:*
By email	*pubcomment-ees.enrd@usdoj.gov.*
By mail	Assistant Attorney General, U.S. DOJ—ENRD, P.O. Box 7611, Washington, DC 20044–7611.

During the public comment period, the Consent Decree may be examined and downloaded at this Justice Department Web site: *https://www.justice.gov/enrd/consent-decrees.* We will provide a paper copy of the Decree upon written request and payment of reproduction costs. Please mail your request and payment to: Consent Decree Library, U.S. DOJ–ENRD, P.O. Box 7611, Washington, DC 20044–7611.

Please enclose a check or money order for $9.50 (25 cents per page reproduction cost) payable to the United States Treasury.

Karen Dworkin,

Assistant Section Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. 2016–20274 Filed 8–23–16; 8:45 am]

BILLING CODE 4410–15–P

DEPARTMENT OF JUSTICE

Office of Justice Programs

[OJP (OJJDP) Docket No. 1724]

Meeting of the Federal Advisory Committee on Juvenile Justice

AGENCY: Office of Juvenile Justice and Delinquency Prevention, Justice.

ACTION: Notice of annual in-person meeting.

SUMMARY: The Office of Juvenile Justice and Delinquency Prevention (OJJDP) has scheduled an Annual Meeting of the Federal Advisory Committee on Juvenile Justice (FACJJ).

DATES: The Annual Meeting will take place on Thursday, September 29, 2016, at 8:30 a.m.–5 p.m. ET and Friday, September 30, 2016, at 8:30 a.m.–12:30 p.m. ET.

ADDRESSES: The meeting will take place in the third floor main conference room at the U.S. Department of Justice, Office of Justice Programs, 810 7th St. NW., Washington, DC 20531.

FOR FURTHER INFORMATION CONTACT: Visit the Web site *www.facjj.org* or contact Jeff Slowikowski, Designated Federal Official, OJJDP, *Jeff.Slowikowski@usdoj.gov* or (202) 616–3646. [This is not a toll-free number.]

SUPPLEMENTARY INFORMATION: FACJJ, established pursuant to Section 3(2)A of the Federal Advisory Committee Act (5 U.S.C. App.2), will meet to carry out its advisory functions under Section 223(f)(2)(C–E) of the Juvenile Justice and Delinquency Prevention Act of 2002. The FACJJ is composed of representatives from the states and territories. FACJJ member duties include: Reviewing Federal policies regarding juvenile justice and delinquency prevention; advising the OJJDP Administrator with respect to particular functions and aspects of OJJDP; and advising the President and Congress with regard to State perspectives on the operation of OJJDP and Federal legislation pertaining to juvenile justice and delinquency prevention. More information on the FACJJ may be found at *www.facjj.org.*

Meeting Agenda: The proposed agenda includes: (a) Opening Introductions, and Meeting Logistics; (b) Remarks of Robert L. Listenbee, Administrator, OJJDP; (c) FACJJ Subcommittee Reports (Legislation; Expungement/Sealing of Juvenile Court Records; Research/Publications; LGBT); (d) FACJJ Administrative Business; (e) New Member Orientation; (f) Ethics Training (g) Discussion of By-Laws; and (h) Summary, Next Steps, and Meeting Adjournment.

Registration: For security purposes, members of the public who wish to attend the meeting in-person must pre-register online at *www.facjj.org* no later than Friday, September 23, 2016. Should problems arise with web registration, contact Melissa Kanaya, Senior Program Manager/Federal Contractor, at 202–532–0121, or send a request to register to Ms. Kanaya at *Melissa.Kanaya@usdoj.gov.* Please include name, title, organization or other affiliation, full address and phone, fax, and email information and send to her attention. Note that these are not toll-free telephone numbers. Additional identification documents may be required. Meeting space is limited. Note: Photo identification will be required for admission to the meeting.

To view the webcast meeting, the public must pre-register online at *www.facjj.org,* no later than Friday, September 23, 2016. Upon registration, information will be sent to you at the email address you provide to enable you to connect to the webcast.

Written Comments: Interested parties may submit written comments by email message in advance to Jeff Slowikowski, Designated Federal Official, at *Jeff.Slowikowski@usdoj.gov,* no later than Friday September 23, 2016. In the alternative, interested parties may fax comments to 202–307–2819 and contact Melissa Kanaya at 202–532–0121 to ensure that they are received. [These are not toll-free numbers.]

Robert L. Listenbee,

Administrator, Office of Juvenile Justice and Delinquency Prevention.

[FR Doc. 2016–20255 Filed 8–23–16; 8:45 am]

BILLING CODE 4410–18–P

DEPARTMENT OF LABOR

Office of the Secretary

Agency Information Collection Activities; Submission for OMB Review; Comment Request; Claim for Compensation by a Dependent Information Reports

ACTION: Notice.

SUMMARY: The Department of Labor (DOL) is submitting the Office of Workers' Compensation Programs (OWCP) sponsored information collection request (ICR) revision titled, "Claim for Compensation by a Dependent Information Reports," to the Office of Management and Budget (OMB) for review and approval for use in accordance with the Paperwork

Reduction Act (PRA) of 1995 (44 U.S.C. 3501 *et seq.*). Public comments on the ICR are invited.

DATES: The OMB will consider all written comments that agency receives on or before September 23, 2016.

ADDRESSES: A copy of this ICR with applicable supporting documentation; including a description of the likely respondents, proposed frequency of response, and estimated total burden may be obtained free of charge from the RegInfo.gov Web site at *http://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201602-1240-003* (this link will only become active on the day following publication of this notice) or by contacting Michel Smyth by telephone at 202–693–4129, TTY 202–693–8064, (these are not toll-free numbers) or sending an email to *DOL_PRA_PUBLIC@dol.gov.*

Submit comments about this request by mail or courier to the Office of Information and Regulatory Affairs, Attn: OMB Desk Officer for DOL–OWCP, Office of Management and Budget, Room 10235, 725 17th Street NW., Washington, DC 20503; by Fax: 202–395–5806 (this is not a toll-free number); or by email: *OIRA_submission@omb.eop.gov.* Commenters are encouraged, but not required, to send a courtesy copy of any comments by mail or courier to the U.S. Department of Labor—OASAM, Office of the Chief Information Officer, Attn: Departmental Information Compliance Management Program, Room N1301, 200 Constitution Avenue NW., Washington, DC 20210; or by email: *DOL_PRA_PUBLIC@dol.gov.*

FOR FURTHER INFORMATION CONTACT: Contact Michel Smyth by telephone at 202–693–4129, TTY 202–693–8064, (these are not toll-free numbers) or sending an email to *DOL_PRA_PUBLIC@dol.gov.*

Authority: 44 U.S.C. 3507(a)(1)(D).

SUPPLEMENTARY INFORMATION: This ICR seeks approval under the PRA for revisions to the Claim for Compensation by a Dependent Information Reports information collection. This ICR covers forms a dependent of a deceased Federal employee, whose death is work-related, uses to prove continued eligibility for benefits, to show entitlement to remaining compensation payments of the deceased employee, and to show dependency. Specifically, this ICR covers Forms CA–5 (Claim for Compensation by Widow, Widower, and/or Children), CA–5b (Claim for Compensation by Parents, Brothers, Sisters, Grandparents, or Grandchildren), CA–1031 (Claimant Support of Dependent), and CA–1074 (Request for Clarification of CA–5b), as well as related form letters used to obtain follow-up information commonly needed to clarify an initial benefit claim. This information collection is considered a revision, because several clarifying changes were made to the forms and letters; however, the changes do not affect the estimated burden. Federal Employee Compensation Act as amended sections 28 and 32 authorize this information collection. *See* 5 U.S.C. 8145 and 8149.

This information collection is subject to the PRA. A Federal agency generally cannot conduct or sponsor a collection of information, and the public is generally not required to respond to an information collection, unless it is approved by the OMB under the PRA and displays a currently valid OMB Control Number. In addition, notwithstanding any other provisions of law, no person shall generally be subject to penalty for failing to comply with a collection of information that does not display a valid Control Number. *See* 5 CFR 1320.5(a) and 1320.6. The DOL obtains OMB approval for this information collection under Control Number 1240–0013. The current approval is scheduled to expire on August 31, 2016; however, the DOL notes that existing information collection requirements submitted to the OMB receive a month-to-month extension while they undergo review. New requirements would only take effect upon OMB approval. For additional substantive information about this ICR, see the related notice published in the **Federal Register** on March 8, 2016 (81 FR 12129).

Interested parties are encouraged to send comments to the OMB, Office of Information and Regulatory Affairs at the address shown in the **ADDRESSES** section within thirty (30) days of publication of this notice in the **Federal Register**. In order to help ensure appropriate consideration, comments should mention OMB Control Number 1240–0013. The OMB is particularly interested in comments that:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Enhance the quality, utility, and clarity of the information to be collected; and
- Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.*, permitting electronic submission of responses.

Agency: DOL–OWCP.

Title of Collection: Claim for Compensation by a Dependent Information Reports.

OMB Control Number: 1240–0013.

Affected Public: Individuals or Households.

Total Estimated Number of Respondents: 1,675.

Total Estimated Number of Responses: 1,675.

Total Estimated Annual Time Burden: 964 hours.

Total Estimated Annual Other Costs Burden: $871.

Dated: August 18, 2016.

Michel Smyth,

Departmental Clearance Officer.

[FR Doc. 2016–20262 Filed 8–23–16; 8:45 am]

BILLING CODE 4510–CH–P

DEPARTMENT OF LABOR

Office of the Secretary

Agency Information Collection Activities; Submission for OMB Review; Comment Request; Weekly Claims and Extended Benefits Data and Weekly Initial and Continued Weeks Claimed

ACTION: Notice.

SUMMARY: The Department of Labor (DOL) is submitting the Employment and Training Administration (ETA) sponsored information collection request (ICR) revision titled, "Weekly Claims and Extended Benefits Data and Weekly Initial and Continued Weeks Claimed," to the Office of Management and Budget (OMB) for review and approval for use in accordance with the Paperwork Reduction Act (PRA) of 1995. Public comments on the ICR are invited.

DATES: The OMB will consider all written comments that agency receives on or before September 23, 2016.

ADDRESSES: A copy of this ICR with applicable supporting documentation; including a description of the likely respondents, proposed frequency of response, and estimated total burden may be obtained free of charge from the *RegInfo.gov* Web site at *http://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=201602-1205-001* (this link will only become active on the day following publication of this notice) or by contacting Michel Smyth by telephone at 202–693–4129, TTY 202–693–8064, (these are not toll-free numbers) or sending an email to *DOL_PRA_PUBLIC@dol.gov.*

Submit comments about this request by mail or courier to the Office of Information and Regulatory Affairs, Attn: OMB Desk Officer for DOL–ETA, Office of Management and Budget, Room 10235, 725 17th Street NW., Washington, DC 20503; by Fax: 202–395–5806 (this is not a toll-free number); or by email: *OIRA_submission@omb.eop.gov.* Commenters are encouraged, but not required, to send a courtesy copy of any comments by mail or courier to the U.S. Department of Labor-OASAM, Office of the Chief Information Officer, Attn: Departmental Information Compliance Management Program, Room N1301, 200 Constitution Avenue NW., Washington, DC 20210; or by email: *DOL_PRA_PUBLIC@dol.gov.*

FOR FURTHER INFORMATION CONTACT: Contact Michel Smyth by telephone at 202–693–4129, TTY 202–693–8064, (these are not toll-free numbers) or sending an email to *DOL_PRA_PUBLIC@dol.gov.*

SUPPLEMENTARY INFORMATION: This ICR seeks approval under the PRA for revisions to the Weekly Claims and Extended Benefits Data and Weekly Initial and Continued Weeks Claimed information collection requirements. This data collection is necessary for the determination of the beginning, continuance, or termination of an Extended Benefit (EB) period in any State that determines the EB trigger rate. In addition, data on initial and continued claims are used to help determine economic indicators. The revisions are related to the Final Rule titled, "Federal-State Unemployment Compensation Program; Implementing the Total Unemployment Rate as an Extended Benefits Indicator and Amending for Technical Corrections," that appears elsewhere today in the **Federal Register**. The Final Rule deletes regulations 20 CFR 615.15 paragraphs (c) and (d) that pertain to records and reports a State agency must submit. The reporting instructions for the proper and timely submission of data are provided in *ET Handbook No. 401* that governs Unemployment Compensation required reporting. Social Security Act section 303(a)(6) and Federal-State Extended Unemployment Compensation Act of 1970 section 203, as amended authorize this information collection. *See* 42 U.S.C. 303(a)(6) and Public Law 91–373, section 203.

This information collection is subject to the PRA. A Federal agency generally cannot conduct or sponsor a collection of information, and the public is generally not required to respond to an information collection, unless it is approved by the OMB under the PRA and displays a currently valid OMB Control Number. In addition, notwithstanding any other provisions of law, no person shall generally be subject to penalty for failing to comply with a collection of information that does not display a valid Control Number. *See* 5 CFR 1320.5(a) and 1320.6. The DOL obtains OMB approval for this information collection under Control Number 1250–0028. The current approval is scheduled to expire on October 31, 2018; however, the DOL notes that existing information collection requirements submitted to the OMB receive a month-to-month extension while they undergo review. New requirements would only take effect upon OMB approval. For additional substantive information about this ICR, see the related notice published in the **Federal Register** on July 7, 2015 (80 FR 38747) and the Final Rule published today under RIN 1205–AB62.

Interested parties are encouraged to send comments to the OMB, Office of Information and Regulatory Affairs at the address shown in the **ADDRESSES** section within thirty (30) days of publication of this notice in the **Federal Register**. The DOL notes that the request for public comments is limited to the information collection requirements; the ETA provided an opportunity for public comment on the underlying regulatory provisions when it published a Proposed Rule in the **Federal Register** on October 24, 2014 (79 FR 63589). In order to help ensure appropriate consideration, comments on the ICR should mention OMB Control Number 1205–0028. The OMB is particularly interested in comments that:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Enhance the quality, utility, and clarity of the information to be collected; and
- Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses.

Agency: DOL–ETA.

Title of Collection: Weekly Claims and Extended Benefits Data and Weekly Initial and Continued Weeks Claimed.

OMB Control Number: 1205–0028.

Affected Public: State, Local, and Tribal Governments.

Total Estimated Number of Respondents: 53.

Total Estimated Number of Responses: 5,512.

Total Estimated Annual Time Burden: 3,675 hours.

Total Estimated Annual Other Costs Burden: $0.

Authority: 44 U.S.C. 3507(a)(1)(D).

Dated: July 27, 2016.

Michel Smyth,

Departmental Clearance Officer.

[FR Doc. 2016–18418 Filed 8–23–16; 8:45 am]

BILLING CODE 4510–FW–P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice (16–058)]

Notice of Intent To Grant an Exclusive License

AGENCY: National Aeronautics and Space Administration.

ACTION: Notice of intent to grant exclusive license.

SUMMARY: This notice is issued in accordance with 35 U.S.C. 209(e) and 37 CFR 404.7(a)(1)(i). The National Aeronautics and Space Administration (NASA) hereby gives notice of its intent to grant an exclusive license in the United States to practice the inventions described and claimed in U.S. Patent Number 8,401,217, titled "Extreme Low Frequency Acoustic Measurement System," NASA Case Number LAR–17317–1, and U.S. Patent Application Serial Number 13/771,735, titled "Extreme Low Frequency Acoustic Measurement System," NASA Case Number LAR–17317–2, to Infrasonix Inc., having its principal place of business in Lawrenceville, GA. The fields of use may be limited to, but not necessarily limited to, human and/or animal healthcare. Certain patent rights in these inventions have been assigned to the United States of America as represented by the Administrator of the National Aeronautics and Space Administration. The prospective exclusive license will comply with the terms and conditions of 35 U.S.C. 209 and 37 CFR 404.7.

DATES: The prospective exclusive license may be granted unless, within fifteen (15) days from the date of this published notice, NASA receives written objections including evidence and argument that establish that the grant of the license would not be consistent with the requirements of 35 U.S.C. 209 and 37 CFR. 404.7. Competing applications completed and received by NASA within fifteen (15) days of the date of this published notice will also be treated as objections to the grant of the contemplated partially exclusive license.

Objections submitted in response to this notice will not be made available to the public for inspection and, to the extent permitted by law, will not be released under the Freedom of Information Act, 5 U.S.C. 552.

ADDRESSES: Objections relating to the prospective license may be submitted to Patent Counsel, Office of Chief Counsel, NASA Langley Research Center, MS 30, Hampton, VA 23681; (757) 864–3221 (phone), (757) 864–9190 (fax).

FOR FURTHER INFORMATION CONTACT: Andrea Z. Warmbier, Patent Attorney, Office of Chief Counsel, NASA Langley Research Center, MS 30, Hampton, VA 23681; (757) 864–7686; Fax: (757) 864–9190. Information about other NASA inventions available for licensing can be found online at *http://technology.nasa.gov.*

Mark P. Dvorscak,

Agency Counsel for Intellectual Property.

[FR Doc. 2016–20175 Filed 8–23–16; 8:45 am]

BILLING CODE 7510–13–P

NATIONAL SCIENCE FOUNDATION

Notice of Intent to Prepare a Comprehensive Environmental Evaluation Under the Antarctic Conservation Act of 1978, as amended

AGENCY: National Science Foundation

ACTION: Notice of Intent to Prepare a Comprehensive Environmental Evaluation (hereinafter CEE) for Continuation of United States Antarctic Program (USAP) Activities

SUMMARY: The National Science Foundation (NSF) announces its intent to prepare a CEE pursuant to the Antarctic Conservation Act, 16 U.S.C. 2401, *et seq.*, as amended, (ACA) and its implementing regulations, and in accordance with the procedures of the Protocol on Environmental Protection to the Antarctic Treaty. The purpose of the CEE is to evaluate the potential environmental effects of continued USAP activities in Antarctica and maintaining or enhancing capabilities that support the USAP. In addition, this CEE will update baseline descriptions of the USAP presented in the 1991 Final Supplemental Environmental Impact Statement for the United States Antarctic Program. (Supplement). NSF originally published a Programmatic Environmental Impact Statement (PEIS) in 1980 and reprinted and redistributed the PEIS in 1984. As noted, a Supplement was prepared in 1991 and project-specific impact analyses have been consistently conducted starting in 1991 and continuing through 2016. By this notice, NSF is announcing the beginning of the scoping process to solicit public comments and identify issues to be analyzed in the CEE.

DATES: This notice initiates the public scoping process for the CEE. Scoping comments on issues may be submitted in writing until October 15, 2016. To be eligible for inclusion in the Draft CEE, all comments must be received prior to the close of the scoping period. NSF will provide additional opportunities for public participation upon publication of the Draft CEE.

ADDRESSES: Written comments should be addressed to Dr. Polly A. Penhale, Environmental Officer, Room 755, Division of Polar Programs, National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230 or by email at *CEE.comments@nsf.gov.*

FOR FURTHER INFORMATION CONTACT: For further information regarding the CEE process, please contact: Dr. Polly A. Penhale, Environmental Officer, at *CEE.comments@nsf.gov.*

SUPPLEMENTARY INFORMATION:

History of the United States Involvement in Antarctica

The United States has been active in Antarctica since its discovery and exploration in the 1800's and has played a crucial role in building the international cooperation necessary for establishing a peaceful human presence on the Earth's last undeveloped continent. Through the Antarctic Treaty, which went into effect with 12 original member nations in 1961, the United States and 52 other nations have agreed to avoid militarization or conflict over territorial claims in the Antarctic Treaty Area, the area of the earth from the South Pole to 60 degrees south latitude. Treaty nations are dedicated to international cooperation, scientific study, and the protection of Antarctica's distinctive environment.

The United States Antarctic Program (USAP)

Since 1956 and without interruption, Americans have been conducting science and education programs in Antarctica. The 2,500 or so American scientists, administrators, and supporting personnel involved in these activities make up USAP. Three year-round research stations are maintained by the USAP: McMurdo, Amundsen-Scott South Pole, and Palmer. From October through February, field research camps are established for research. McMurdo Station, the largest station in Antarctica is USAP's logistics hub and a center for scientific studies. The Amundsen-Scott South Pole Station supports astronomy, upper atmosphere science, meteorology, glaciology, and earth sciences studies. Palmer Station, on Anvers Island just west of the Antarctic Peninsula, is primarily a marine biology center and also supports upper atmospheric sciences and other studies.

USAP transportation infrastructure includes vessels, aircraft, and tractor-based traverse capabilities. USAP operates two research vessels (the Laurence M. Gould and the Nathaniel B. Palmer) and deploys a fuel tanker, resupply vessel, and a United States Coast Guard ice breaker once annually. The United States Air National Guard and Air Force operate LC–130 and C–17 aircraft supporting intracontinental and intercontinental transport of equipment, material, and people. In addition, DeHavilland Twin Otter and Basler BT–67 aircraft, plus helicopters transport research teams to remote research locations. Traverses are a critical method to transport fuel and material to South Pole Station, Black Island, and Marble Point from McMurdo Station. Similarly, traverse capabilities are in used to support major deep field science projects.

The NSF has overall management responsibility for USAP and U.S. activities in Antarctica. However, several federal agencies have important roles in the U.S. presence in Antarctica. The Department of Defense assists in planning and provides logistical support to USAP. The Department of Homeland Security's United States Coast Guard provides icebreaker services and other assistance, as required. Further, the United States has strong diplomatic interests in Antarctica and the Department of State coordinates U.S. policy on Antarctica.

USAP Activities in Antarctica

USAP activities have increased in complexity and locations over the years.

Over 124 science projects were supported by USAP during the 2015–2016 austral summer season. Examples of recent complex USAP projects include ecosystem-scale, multi-disciplinary projects; study of deep subglacial lakes; installation and operation of Project IceCube (a neutrino detector at South Pole Station); upgrades to the South Pole Telescope, and extensive marine and terrestrial seismic projects. The demand for science and education programs in Antarctica is expected to continue increasing over the next decade.

In addition to supporting increasingly complex science and education programs in Antarctica, a safety, environment, and health program has enabled USAP to reduce the health and safety risks to participants and improve environmental protection. USAP has made significant progress in the remediation of old waste disposal sites and in the removal of wastes from Antarctica.

Because the science and education programs supported by USAP are increasing in size and complexity, improved equipment, more specialized facilities, additional electrical power, and improved logistical support are required. USAP has met many of these emerging needs, including construction and operation of the Crary Science and Engineering Center and the Science Support Center at McMurdo Station.

However, approximately 60 years after USAP began much of the infrastructure at each of the three year-round USAP Stations has exceeded its intended life expectancy. USAP stations were originally built to serve the newly developing Antarctic science and education programs of the 1950s and 1960s. With few people or facilities in Antarctica, there was an expeditionary approach to infrastructure development. Energy efficiency and environmental protection were not high priorities. Today, much of the USAP infrastructure cannot meet modern practices without replacement, significant repair, or substantial restrictions in use. Reconstruction of the Amundsen-Scott South Pole Station was completed in 2010; however, the Station and outlying facilities require repairs and ongoing maintenance in order to support current and future science and education programs.

Issues and Possible Alternatives for USAP Activities

In 2011, a Blue Ribbon Panel was established by the Directors of the Office of Science and Technology Policy and of the NSF to assess the current USAP operations, logistics and management and make recommendations on a long-term strategy to deliver an efficient and effective national research program. The 2012 report "More and Better Science in Antarctica through Increased Logistical Effectiveness" provided a basis for discussions among USAP participants, managers, scientists, educators, and NSF leadership. From these discussions and others, the following USAP needs have been identified:

- Capacity and flexibility to adapt to the changing needs of USAP science and education in Antarctica over a 35–50 year planning horizon
- Increased energy conservation (reduced energy consumption)
- Increased operational efficiency (*e.g.,* reduced costs and personnel requirements)
- A continued safe and healthy working environment for USAP personnel and visitors
- A continued high standard of environmental stewardship in Antarctica
- Reflecting the "active and influential presence" in Antarctica in a manner consistent with U.S. stature in the international research community
- Reflecting the professional nature of NSF and its scientific activities

These needs are important considerations in meeting USAP's long-term goals and may generate conflicts in the use of available resources. To more fully respond to these needs, NSF has been preparing Master Plans for McMurdo and Palmer stations. In addition, NSF has been expanding planning efforts to address the needs of other USAP components including South Pole Station, field camps, vessels, and traverse capabilities. To address the issues and fulfill the purpose and need of the proposed action, two alternatives have been identified for evaluation in the CEE:

Alternative A—Implement the McMurdo Station Master Plan, Palmer Station Master Plan, South Pole Station renovation and maintenance plan; and maintain and improve traverse, field camp, and marine capabilities (Proposed Action). This alternative would include the modernization of McMurdo Station and Palmer Station through reconstruction, consolidation, and renovation of facilities. Critical maintenance as well as facility and infrastructure improvements would be made at the Amundsen-Scott South Pole Station. Traverse, field camp, and marine operations and capabilities would be maintained and enhanced to meet evolving science requirements, improve efficiencies, and continue to protect health, safety, and the environment.

Alternative B—Maintain facilities and capabilities at the current level of performance. This alternative maintains the "status quo" of USAP facilities and capabilities across the program, including at all three stations, camps, traverse, and vessels. This alternative represents the 'No action' alternative. The improvement or replacement of facilities to prevent major structural failures, and mitigate risks to health and safety, would be conducted on a modest, long-term implementation schedule.

The purpose of the public scoping process is to determine relevant issues that will influence the scope of the environmental analysis, including identification of viable alternatives, and guide the process for developing the CEE. At present, NSF has identified the following preliminary resource areas for analysis of potential impacts: Air quality, climate, marine and terrestrial biological resources, geological resources, glacial resources, water quality, groundwater resources, aesthetics, wilderness values, solid waste generation, and health and safety. Federal, state, and local agencies, along with other stakeholders that may be interested or affected by NSF's decision on this proposal are invited to participate in the scoping process.

Dated: August 19, 2016.

Nadene G. Kennedy,

Polar Coordination Specialist, Division of Polar Programs.

[FR Doc. 2016–20242 Filed 8–23–16; 8:45 am]

BILLING CODE 7555–01–P

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards (ACRS) Meeting of the ACRS Subcommittee on Reliability and PRA; Notice of Meeting

The ACRS Subcommittee on Reliability and PRA will hold a meeting on September 7, 2016, Room T–2B1, 11545 Rockville Pike, Rockville, Maryland.

The meeting will be open to public attendance.

The agenda for the subject meeting shall be as follows:

Wednesday, September 7, 2016—1 p.m. Until 5 p.m.

The Subcommittee will be briefed on the activities of Risk-Informed Steering Committee from both the staff and the industry. The Subcommittee will hear presentations by and hold discussions with the NRC staff, the industry, and interested persons regarding this matter. The Subcommittee will gather information, analyze relevant issues and facts, and formulate proposed positions and actions, as appropriate, for deliberation by the Full Committee.

Members of the public desiring to provide oral statements and/or written comments should notify the Designated Federal Official (DFO), John Lai (Telephone 301–415–5197 or Email: *John.Lai@nrc.gov*) five days prior to the meeting, if possible, so that appropriate arrangements can be made. Thirty-five hard copies of each presentation or handout should be provided to the DFO thirty minutes before the meeting. In addition, one electronic copy of each presentation should be emailed to the DFO one day before the meeting. If an electronic copy cannot be provided within this timeframe, presenters should provide the DFO with a CD containing each presentation at least thirty minutes before the meeting. Electronic recordings will be permitted only during those portions of the meeting that are open to the public. Detailed procedures for the conduct of and participation in ACRS meetings were published in the **Federal Register** on October 21, 2015 (80 FR 63846).

Detailed meeting agendas and meeting transcripts are available on the NRC Web site at *http://www.nrc.gov/reading-rm/doc-collections/acrs.* Information regarding topics to be discussed, changes to the agenda, whether the meeting has been canceled or rescheduled, and the time allotted to present oral statements can be obtained from the Web site cited above or by contacting the identified DFO. Moreover, in view of the possibility that the schedule for ACRS meetings may be adjusted by the Chairman as necessary to facilitate the conduct of the meeting, persons planning to attend should check with these references if such rescheduling would result in a major inconvenience.

If attending this meeting, please enter through the One White Flint North Building, 11555 Rockville Pike, Rockville, Maryland. After registering with security, please contact Mr. Theron Brown (Telephone 240–888–9835) to be escorted to the meeting room.

Dated: August 17, 2016.

Mark L. Banks,

Chief, Technical Support Branch, Advisory Committee on Reactor Safeguards.

[FR Doc. 2016–20266 Filed 8–23–16; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards (ACRS) Meeting of the ACRS Subcommittee on T–H Phenomena; Notice of Meeting

The ACRS Subcommittees on T–H Phenomenon and Metallurgy & Reactor Fuels will hold a meeting on September 19, 2016, Room T–2B1, 11545 Rockville Pike, Rockville, Maryland.

The meeting will be open to public attendance with the exception of portions that may be closed to protect information that is proprietary pursuant to 5 U.S.C. 552b(c)(4). The agenda for the subject meeting shall be as follows:

Monday, September 19, 2016—8:30 a.m. Until 5 p.m.

The Subcommittee will review the fidelity of methods and codes for operation at AREVA's Extended Flow Window (plant-specific Monticello). The Subcommittee will hear presentations by and hold discussions with the NRC staff regarding this matter. The Subcommittee will gather information, analyze relevant issues and facts, and formulate proposed positions and actions, as appropriate, for deliberation by the Full Committee.

Members of the public desiring to provide oral statements and/or written comments should notify the Designated Federal Official (DFO), Zena Abdullahi (Telephone 301–415–8716 or Email: *Zena.Abdullahi@nrc.gov*) five days prior to the meeting, if possible, so that appropriate arrangements can be made. Thirty-five hard copies of each presentation or handout should be provided to the DFO thirty minutes before the meeting. In addition, one electronic copy of each presentation should be emailed to the DFO one day before the meeting. If an electronic copy cannot be provided within this timeframe, presenters should provide the DFO with a CD containing each presentation at least thirty minutes before the meeting. Electronic recordings will be permitted only during those portions of the meeting that are open to the public. Detailed procedures for the conduct of and participation in ACRS meetings were published in the **Federal Register** on October 21, 2015, (80 FR 63846).

Detailed meeting agendas and meeting transcripts are available on the NRC Web site at *http://www.nrc.gov/reading-rm/doc-collections/acrs.* Information regarding topics to be discussed, changes to the agenda, whether the meeting has been canceled or rescheduled, and the time allotted to present oral statements can be obtained from the Web site cited above or by contacting the identified DFO. Moreover, in view of the possibility that the schedule for ACRS meetings may be adjusted by the Chairman as necessary to facilitate the conduct of the meeting, persons planning to attend should check with these references if such rescheduling would result in a major inconvenience.

If attending this meeting, please enter through the One White Flint North building, 11555 Rockville Pike, Rockville, MD. After registering with security, please contact Mr. Theron Brown (Telephone 240–888–9835) to be escorted to the meeting room.

Dated: August 16, 2016.

Mark L. Banks,

Chief, Technical Support Branch, Advisory Committee on Reactor Safeguards.

[FR Doc. 2016–20270 Filed 8–23–16; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–275 and 50–323; NRC–2009–0552]

Pacific Gas and Electric Company; Diablo Canyon Power Plant, Units 1 and 2; Annual Updates to License Renewal Application

AGENCY: Nuclear Regulatory Commission.

ACTION: Exemption; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing an exemption in response to an August 1, 2016, request from Pacific Gas and Electric Company (PG&E), which requested an exemption from the requirement to submit annual updates to its license renewal application (LRA) for Diablo Canyon Power Plant (DCPP), Units 1 and 2. The NRC staff reviewed this request and determined that it is appropriate to grant the exemption while the review of the LRA remains suspended.

DATE: The exemption is effective on August 24, 2016.

ADDRESSES: Please refer to Docket ID NRC–2009–0552 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- Federal Rulemaking Web site: Go to *http://www.regulations.gov* and search for Docket ID NRC–2009–0552. Address questions about NRC dockets to Carol Gallagher; telephone: 301–415–3463;

email: *Carol.Gallagher@nrc.gov*. For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- NRC's Agencywide Documents Access and Management System (ADAMS): You may obtain publicly-available documents online in the ADAMS Public Documents collection at *http://www.nrc.gov/reading-rm/adams.html*. To begin the search, select "ADAMS Public Documents" and then select "*Begin Web-based ADAMS Search.*" For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov*. The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that a document is referenced.
- NRC's PDR: You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Michael J. Wentzel, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington DC 20555–0001; telephone: 301–415–6459; email: *Michael.Wentzel@nrc.gov*.

SUPPLEMENTARY INFORMATION:

I. Background

By letter dated November 23, 2009 (ADAMS Package No. ML093340125), PG&E submitted an application pursuant to part 54 of title 10 of the *Code of Federal Regulations* (10 CFR) for the renewal of Facility Operating Licenses DPR–80 and DPR–82 for DCPP. A notice of acceptance for docketing of the application and opportunity for hearing regarding renewal of the facility operating licenses was published in the **Federal Register** on January 21, 2010 (75 FR 3493). On June 21, 2016, PG&E notified the NRC that it had reached an agreement in principle with various stakeholders to not proceed with the DCPP license renewal and requested that the NRC suspend activity on the LRA, pending approval of the agreement by the California Public Utilities Commission (ADAMS Accession No. ML16173A454). On July 28, 2016, the NRC staff notified PG&E that it had suspended its review of the DCPP LRA (ADAMS Accession No. ML16193A599). Although the NRC staff has suspended its review of the DCPP LRA, the NRC's regulations at 10 CFR 54.21(b) would still require PG&E to provide an annual update to its LRA identifying changes made to the current licensing basis (CLB) for DCPP that materially affect the LRA, absent this exemption request.

II. Request/Action

Pursuant to 10 CFR 54.15, "Specific exemptions," which references 10 CFR 50.12, PG&E's letter dated August 1, 2016 (ADAMS Accession No. ML16214A369), requested an exemption from the requirements of 10 CFR 54.21, "Contents of application—technical information," paragraph (b), related to the schedule for submitting periodic updates to the DCPP LRA, while the NRC staff's review of the DCPP LRA is suspended. Given PG&E's request for approval from the California Public Utilities Commission to not proceed with license renewal for DCPP, PG&E is requesting exemption from the requirements in 10 CFR 54.21(b). Should the California Public Utilities Commission deny PG&E's request and direct PG&E to pursue license renewal, PG&E would provide an amendment to the DCPP LRA that identifies changes to the CLB of the facility that materially affect the contents of the LRA by a date agreed upon between PG&E and the NRC.

III. Discussion

Pursuant to 10 CFR 54.15, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of 10 CFR part 54, in accordance with 10 CFR 50.12, when (1) the exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security; and (2) special circumstances are present. As applicable to the requested exemption, special circumstances exist when application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule (10 CFR 50.12(a)(2)(ii)).

The purpose of 10 CFR 54.21(b) is to ensure that the effect of changes to a renewal applicant's existing licensing basis is evaluated during the review of a renewal application (56 FR 64954). As referenced above, the NRC staff has suspended its review of the DCPP LRA in response to PG&E's June 21, 2016, request. As such, the NRC staff would not review an update to the DCPP LRA, should it be provided; therefore, updating the LRA while the review is suspended is unnecessary to achieve the underlying purpose of the rule. Should PG&E resume the license renewal process for DCPP, the NRC will require it to provide an amendment to the DCPP LRA that identifies applicable changes to the CLB of the facility since the period of time covered in PG&E's December 21, 2015, update (ADAMS Accession No. ML16004A149) by a date agreed upon between PG&E and the NRC.

Authorized by Law

Pursuant to 10 CFR 54.15, and in accordance with 10 CFR 50.12, the NRC may grant an exemption from the requirements of 10 CFR part 54, if the exemption is authorized by law. The exemption is authorized by law in that no other prohibition of law exists to preclude the activities which would be authorized by the exemption. Granting this exemption will provide PG&E with relief from the requirements of 10 CFR 54.21(b) while review of the DCPP LRA is suspended and will not result in a violation of the Atomic Energy Act of 1954, as amended, or the NRC's regulations. Therefore, this exemption request is authorized by law.

No Undue Risk to Public Health and Safety

The underlying purpose of 10 CFR 54.21(b) is to ensure that changes made to the CLB of a facility that materially affect an LRA are reflected in a timely manner over the course of the NRC staff's review. The requested exemption is administrative in nature, in that it pertains to the schedule for submitting periodic updates of an application for renewal under 10 CFR part 54. Based on the nature of the requested exemption as described above, no new accident precursors are created by the exemption. As a result, neither the probability, nor the consequences, of postulated accidents are increased. Therefore, the requested exemption does not result in any undue risk to public health and safety.

Consistent With Common Defense and Security

The requested exemption would exempt PG&E from providing updates to the DCPP LRA while review of the LRA is suspended. This proposed change has no relation to security issues. Therefore, the common defense and security is not impacted by the exemption.

Special Circumstances

Special circumstances, in accordance with 10 CFR 50.12(a)(2), are present whenever application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule (10 CFR 50.12(a)(2)(ii)).

As discussed above, the requested exemption will exempt PG&E from submitting LRA updates while the NRC's review of the application is suspended. Because the NRC staff would not review an update to the DCPP LRA, should it be provided, application of 10 CFR 54.21(b) is not necessary to achieve the underlying purpose of the rule. Therefore, special circumstances exist under 10 CFR 50.12(a)(2)(ii).

Eligibility for Categorical Exclusion From Environmental Review

With respect to the exemption's impact on the quality of the human environment, the NRC has determined that this specific exemption request is eligible for categorical exclusion as identified in 10 CFR 51.22(c)(25). Under 10 CFR 51.22(c)(25), granting of an exemption from the requirements of any regulation of 10 CFR chapter 1 (which includes 10 CFR 54.21(b)) is an action that is a categorical exclusion, provided that it meets the requirements of 10 CFR 51.22(c)(25)(i) through (vi). The NRC staff's determination that each of the applicable criteria for this categorical exclusion is met as follows:

I. 10 CFR 51.22(c)(25)(i): There is no significant hazards consideration.

Staff Analysis: The criteria for determining if an exemption involves a significant hazards consideration are found in 10 CFR 50.92. The action involves only changes regarding the submission of updates to an application for which the licensing review is currently suspended. Therefore, there are no significant hazard considerations because granting the exemption would not:

(1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or

(2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or

(3) Involve a significant reduction in a margin of safety.

II. 10 CFR 51.22(c)(25)(ii): There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

Staff Analysis: The proposed action involves only a change regarding the submission of updates, which is administrative in nature, and does not involve any changes in the types or significant increase in the amounts of effluents that may be released offsite.

III. 10 CFR 51.22(c)(25)(iii): There is no significant increase in individual or cumulative public or occupational radiation exposure.

Staff Analysis: Since the proposed action involves only a change regarding the submission of updates, which is administrative in nature, it does not contribute to any significant increase in occupational or public radiation exposure.

IV. 10 CFR 51.22(c)(25)(iv): There is no significant construction impact.

Staff Analysis: Since the proposed action involves only a change regarding the submission of updates, which is administrative in nature; it does not involve any construction impact.

V. 10 CFR 51.22(c)(25)(v): There is no significant increase in the potential for or consequences from radiological accidents.

Staff Analysis: The proposed action involves only a change regarding the submission of updates, which is administrative in nature and does not impact the probability or consequences of accidents.

VI. 10 CFR 51.22(c)(25)(vi): The requirements from which this exemption is sought involve 10 CFR 51.22(c)(25)(vi)(B) (reporting requirements) and 10 CFR 51.22(c)(25)(vi)(G) (scheduling requirements).

Staff Analysis: The exemption request involves requirements in both of these categories because it involves suspending the requirement contained in 10 CFR 54.21(b) to provide an update to the DCPP LRA each year following submittal of the LRA.

IV. Conclusions

The NRC has determined that, pursuant to 10 CFR 54.15, and in accordance with 10 CFR 50.12, the exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. Also, special circumstances exist under 10 CFR 50.12(a)(2)(ii). Therefore, the NRC hereby grants PG&E this exemption from the requirements of 10 CFR 54.21(b) to allow PG&E to dispense with the submission of updates to the DCPP LRA while the NRC's review of the LRA is suspended. Should PG&E resume the license renewal process for DCPP, the NRC will require it to provide an amendment to the DCPP LRA that identifies applicable changes to the CLB of the facility since the period of time covered in PG&E's December 21, 2015, update by a date agreed upon between PG&E and the NRC.

Additionally, pursuant to 10 CFR 51.22, the Commission has determined that the exemption request meets the applicable categorical exclusion criteria set forth in 10 CFR 51.22(c)(25), and the granting of this exemption will not have a significant effect on the quality of the human environment.

Dated at Rockville, Maryland, this 17th Day of August 2016.

For the Nuclear Regulatory Commission.

Jane E. Marshall,

Acting Director, Division of License Renewal, Office of Nuclear Reactor Regulation.

[FR Doc. 2016–20272 Filed 8–23–16; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards (ACRS) Meeting of the ACRS Subcommittee on Digital I&C Systems; Notice of Meeting

The ACRS Subcommittee on Digital I&C Systems will hold a meeting on September 7, 2016, Room T–2B1, 11545 Rockville Pike, Rockville, Maryland.

The meeting will be open to public attendance.

The agenda for the subject meeting shall be as follows:

Wednesday, September 7, 2016—8:30 a.m. Until 12 p.m.

The Subcommittee will review the Methods for Assuring Safety and Dependability when Applying Digital Instrumentation and Control Systems. The Subcommittee will hear presentations by and hold discussions with the NRC staff, representatives from EPRI, and other interested persons regarding this matter. The Subcommittee will gather information, analyze relevant issues and facts, and formulate proposed positions and actions, as appropriate, for deliberation by the Full Committee.

Members of the public desiring to provide oral statements and/or written comments should notify the Designated Federal Official (DFO), Christina Antonescu (Telephone 301–415–6792 or Email: *Christina.Antonescu@nrc.gov*) five days prior to the meeting, if possible, so that appropriate arrangements can be made. Thirty-five hard copies of each presentation or handout should be provided to the DFO thirty minutes before the meeting. In addition, one electronic copy of each presentation should be emailed to the DFO one day before the meeting. If an electronic copy cannot be provided within this timeframe, presenters should provide the DFO with a CD containing each presentation at least thirty minutes before the meeting. Electronic recordings will be permitted only during those portions of the meeting that are open to the public. Detailed procedures for the conduct of and participation in ACRS meetings were published in the **Federal Register** on October 21, 2015, (80 FR 63846).

Detailed meeting agendas and meeting transcripts are available on the NRC Web site at *http://www.nrc.gov/reading-rm/doc-collections/acrs.* Information regarding topics to be discussed, changes to the agenda, whether the meeting has been canceled or rescheduled, and the time allotted to present oral statements can be obtained from the Web site cited above or by contacting the identified DFO. Moreover, in view of the possibility that the schedule for ACRS meetings may be adjusted by the Chairman as necessary to facilitate the conduct of the meeting, persons planning to attend should check with these references if such rescheduling would result in a major inconvenience.

If attending this meeting, please enter through the One White Flint North Building, 11555 Rockville Pike, Rockville, MD. After registering with security, please contact Mr. Theron Brown (Telephone 240–888–9835) to be escorted to the meeting room.

Dated: August 17, 2016.

Mark L. Banks,

Chief, Technical Support Branch, Advisory Committee on Reactor Safeguards.

[FR Doc. 2016–20261 Filed 8–23–16; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards (ACRS); Meeting of the ACRS Subcommittee on Metallurgy & Reactor Fuels; Notice of Meeting

The ACRS Subcommittee on Metallurgy & Reactor Fuels will hold a meeting on September 20, 2016, Room T–2B1, 11545 Rockville Pike, Rockville, Maryland.

The meeting will be open to public attendance.

The agenda for the subject meeting shall be as follows:

Tuesday, September 20, 2016—8:30 a.m. until 12:00 p.m.

The Subcommittee will discuss the draft Managing Aging Processes in Storage (MAPS) Report. The Subcommittee will hear presentations by and hold discussions with the NRC staff and other interested persons regarding this matter. The Subcommittee will gather information, analyze relevant issues and facts, and formulate proposed positions and actions, as appropriate, for deliberation by the Full Committee.

Members of the public desiring to provide oral statements and/or written comments should notify the Designated Federal Official (DFO), Christopher Brown (Telephone 301–415–7111 or Email: *Christopher.Brown@nrc.gov*) five days prior to the meeting, if possible, so that appropriate arrangements can be made. Thirty-five hard copies of each presentation or handout should be provided to the DFO thirty minutes before the meeting. In addition, one electronic copy of each presentation should be emailed to the DFO one day before the meeting. If an electronic copy cannot be provided within this timeframe, presenters should provide the DFO with a CD containing each presentation at least thirty minutes before the meeting. Electronic recordings will be permitted only during those portions of the meeting that are open to the public. Detailed procedures for the conduct of and participation in ACRS meetings were published in the **Federal Register** on October 21, 2015, (80 FR 63846).

Detailed meeting agendas and meeting transcripts are available on the NRC Web site at *http://www.nrc.gov/reading-rm/doc-collections/acrs.* Information regarding topics to be discussed, changes to the agenda, whether the meeting has been canceled or rescheduled, and the time allotted to present oral statements can be obtained from the Web site cited above or by contacting the identified DFO. Moreover, in view of the possibility that the schedule for ACRS meetings may be adjusted by the Chairman as necessary to facilitate the conduct of the meeting, persons planning to attend should check with these references if such rescheduling would result in a major inconvenience.

If attending this meeting, please enter through the One White Flint North building, 11555 Rockville Pike, Rockville, MD. After registering with security, please contact Mr. Theron Brown (Telephone 240–888–9835) to be escorted to the meeting room.

Dated: August 17, 2016.

Mark L. Banks,

Chief, Technical Support Branch, Advisory Committee on Reactor Safeguards.

[FR Doc. 2016–20260 Filed 8–23–16; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards (ACRS); Meeting of the ACRS Subcommittee on Planning and Procedures; Notice of Meeting

The ACRS Subcommittee on Planning and Procedures will hold a meeting on September 8, 2016, Room T–2B3, 11545 Rockville Pike, Rockville, Maryland.

The meeting will be open to public attendance with the exception of a portion that may be closed pursuant to 5 U.S.C. 552b(c)(2) and (6) to discuss organizational and personnel matters that relate solely to the internal personnel rules and practices of the ACRS, and information the release of which would constitute a clearly unwarranted invasion of personal privacy.

The agenda for the subject meeting shall be as follows:

Thursday, September 8, 2016—12 p.m. Until 1 p.m.

The Subcommittee will discuss proposed ACRS activities and related matters. The Subcommittee will gather information, analyze relevant issues and facts, and formulate proposed positions and actions, as appropriate, for deliberation by the Full Committee.

Members of the public desiring to provide oral statements and/or written comments should notify the Designated Federal Official (DFO), Quynh Nguyen (Telephone 301–415–5844 or Email: *Quynh.Nguyen@nrc.gov*) five days prior to the meeting, if possible, so that arrangements can be made. Thirty-five hard copies of each presentation or handout should be provided to the DFO thirty minutes before the meeting. In addition, one electronic copy of each presentation should be emailed to the DFO one day before the meeting. If an electronic copy cannot be provided within this timeframe, presenters should provide the DFO with a CD containing each presentation at least thirty minutes before the meeting. Electronic recordings will be permitted only during those portions of the meeting that are open to the public. Detailed procedures for the conduct of and participation in ACRS meetings were published in the **Federal Register** on October 21, 2015 (80 FR 63846).

Information regarding changes to the agenda, whether the meeting has been canceled or rescheduled, and the time allotted to present oral statements can be obtained by contacting the identified DFO. Moreover, in view of the possibility that the schedule for ACRS meetings may be adjusted by the

Chairman as necessary to facilitate the conduct of the meeting, persons planning to attend should check with the DFO if such rescheduling would result in a major inconvenience.

If attending this meeting, please enter through the One White Flint North Building, 11555 Rockville Pike, Rockville, MD. After registering with security, please contact Mr. Theron Brown (240–888–9835) to be escorted to the meeting room.

Dated: August 16, 2016.

Mark L. Banks,

Chief, Technical Support Branch, Advisory Committee on Reactor Safeguards.

[FR Doc. 2016–20269 Filed 8–23–16; 8:45 am]

BILLING CODE 7590–01–P

OFFICE OF PERSONNEL MANAGEMENT

[OMB Control No. 3206–0131]

Revision of Information Collection: Combined Federal Campaign Applications

AGENCY: U.S. Office of Personnel Management.

ACTION: 30-Day notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (Pub. L. 104–13, May 22, 1995), this notice announces that the Office of Personnel Management intends to submit to the Office of Management and Budget (OMB) a request for clearance to revise an information collection. Combined Federal Campaign Applications, OMB Control No. 3206–0131, which include OPM Forms 1647–A, –B, and –E, are used to review the eligibility of national, international, and local charitable organizations and Department of Defense morale, welfare, and recreation (MWR)/Family Support and Youth Activities/Programs (FSYA/FSYP) organizations that wish to participate in the Combined Federal Campaign. The proposed revisions reflect changes in eligibility guidance from the Office of Personnel Management. On March 10, 2016, we published a 60-day notice and request for comments. We received two comments recommending the addition of a "thank you statement" field that would facilitate immediate acknowledgement of electronic pledges. This recommended revision is included below.

We estimate 20,500 responses to this information collection annually. Each form takes approximately three hours to complete. The annual estimated burden is 40,500 hours.

DATES: Comments are encouraged and will be accepted until September 23, 2016. This process is conducted in accordance with 5 CFR 1320.1.

ADDRESSES: Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, Office of Management Budget, 725 17th Street NW., Washington, DC 20503, Attention: Desk Officer for the Office of Personnel Management or sent via electronic mail to *oira_submission@omb.eop.gov* or faxed to (202) 395–6974.

FOR FURTHER INFORMATION CONTACT: A copy of this ICR, with applicable supporting documentation, may be obtained by contacting the Office of Information and Regulatory Affairs, Office of Management Budget, 725 17th Street NW., Washington, DC 20503, Attention: Desk Officer for the Office of Personnel Management or sent via electronic mail to *oira_submission@omb.eop.gov* or faxed to (202) 395–6974.

SUPPLEMENTARY INFORMATION: The Office of Management and Budget is particularly interested in comments that:

1. Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
2. Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
3. Enhance the quality, utility, and clarity of the information to be collected; and
4. Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submissions of responses.

The Combined Federal Campaign (CFC) is the world's largest and most successful annual workplace philanthropic giving campaign, with 127 CFC campaigns throughout the country and overseas raising millions of dollars each year. The mission of the CFC is to promote and support philanthropy through a program that is employee focused, cost-efficient, and effective in providing all federal employees the opportunity to improve the quality of life for all.

The CFC charity applications collect information from about 20,500 national, international, and local charities for inclusion on the CFC charity list. This ICR is being revised to accommodate presentation in an online CFC charity application format. Revisions include:

1. The addition of name and email fields for CFC application system account creation;
2. the inclusion of electronic fund transfer (EFT) information (for national and international charities);
3. the addition of a "thank you statement" field to facilitate immediate acknowledgement of electronic pledges;
4. the addition of three questions surrounding volunteers opportunities and solicitation of federal employees for these opportunities;
5. design of the schedule of services to align with an online form; and
6. revision of certification statements to make them parallel with eligibility requirements at 5 CFR 950 as revised April 16, 2014, effective January 1, 2017.

U.S. Office of Personnel Management.

Beth F. Cobert,

Acting Director.

[FR Doc. 2016–20190 Filed 8–23–16; 8:45 am]

BILLING CODE 6325–46–P

SECURITIES AND EXCHANGE COMMISSION

Submission for OMB Review; Comment Request

Upon Written Request, Copies Available From: Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE., Washington, DC 20549–2736.

Extension:

Rule 19b–4 and Form 19b–4 Filings with Respect to Proposed Rule Changes, Securities-Based Swap Submissions, and Advance Notices by Self-Regulatory Organizations and the Security-Based Swap Stay of Clearing Requirement; SEC File No. 270–38, OMB Control No. 3235–0045.

Notice is hereby given that pursuant to the Paperwork Reduction Act of 1995 ("PRA") (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission ("Commission") has submitted to the Office of Management and Budget ("OMB") a request for approval of extension of the of the previously approved collection of information provided for in Rule 19b–4 (17 CFR 240.19b–4), under the Securities Exchange Act of 1934 ("Act") (15 U.S.C. 78a *et seq.*).

Section 19(b) of the Act (15 U.S.C. 78s(b)) requires each self-regulatory organization ("SRO") to file with the Commission copies of any proposed rule, or any proposed change in, addition to, or deletion from the rules of such SRO. Rule 19b–4 implements the requirements of Section 19(b) by requiring the SROs to file their proposed rule changes on Form 19b–4 and by clarifying which actions taken by SROs are subject to the filing requirement set forth in Section 19(b). Rule 19b–4(n) requires a designated clearing agency to provide the Commission advance notice (''Advance Notice'') of any proposed change to its rules, procedures, or operations that could materially affect the nature or level of risks presented by such clearing agency. Rule 19b–4(o) requires a registered clearing agency to submit for a Commission determination any security-based swap, or any group, category, type, or class of security-based swaps it plans to accept for clearing (''Security-Based Swap Submission''), and provide notice to its members of such submissions.

The collection of information is designed to provide the Commission with the information necessary to determine, as required by the Act, whether the proposed rule change is consistent with the Act and the rules thereunder. The information is used to determine if the proposed rule change should be approved, disapproved, suspended, or if proceedings should be instituted to determine whether to approve or disapprove the proposed rule change.

The respondents to the collection of information are SROs (as defined by Section 3(a)(26) of the Act),[1] including national securities exchanges, national securities associations, registered clearing agencies, notice registered securities future product exchanges, and the Municipal Securities Rulemaking Board.

In calendar year 2015, each respondent filed an average of approximately 57 proposed rule changes. Each filing takes approximately 39 hours to complete on average. Thus, the total annual reporting burden for filing proposed rule changes with the Commission is 86,697 hours (57 proposals per year × 39 SROs × 39 hours per filing) for the estimated future number of 39 SROs.[2] In addition to filing their proposed rule changes with the Commission, the respondents also are required to post each of their proposals on their respective Web sites, a process that takes approximately four hours to complete per proposal. Thus, for 1,935 proposals, the total annual reporting burden on respondents to post the proposals on their Web sites is 7,740 hours (1,935 proposals per year × 4 hours per filing) or 8,892 hours (57 proposals per year × 39 SROs × 4 hours per filing) for the estimated future number of 39 SROs. Further, the respondents are required to update their rulebooks, which they maintain on their Web sites, to reflect the changes that they make in each proposal they file. Thus, for all filings that were not withdrawn by a respondent (240 withdrawn filings in calendar year 2015) or disapproved by the Commission (6 disapproved filings in calendar year 2015), the respondents were required to update their online rulebooks to reflect the effectiveness of 1,689 proposals, each of which takes approximately four hours to complete per proposal. Thus, the total annual reporting burden for updating online rulebooks is 7,764 hours ((2,223 filings per year − 275 withdrawn filings[3] − 7 disapproved filings[4]) × 4 hours). Finally, a respondent is required to notify the Commission if it does not post a proposed rule change on its Web site on the same day that it filed the proposal with the Commission. The Commission estimates that SROs will fail to post proposed rule changes on their Web sites on the same day as the filing 22 times a year (across all SROs), and that each SRO will spend approximately one hour preparing and submitting such notice to the Commission, resulting in a total annual burden of 22 hours (22 notices × 1 hour per notice).

Designated clearing agencies have additional information collection burdens. As noted above, pursuant to Rule 19b–4(n), a designated clearing agency must file with the Commission an Advance Notice of any proposed change to its rules, procedures, or operations that could materially affect the nature or level of risks presented by such designated clearing agency. The Commission estimates that four designated clearing agencies will each submit five Advance Notices per year, with each submission taking 90 hours to complete. The total annual reporting burden for filing Advance Notices is therefore 1,800 hours (4 designated clearing agencies × 5 Advance Notices per year × 90 hours per response).

Designated clearing agencies are required to post all Advance Notices to their Web sites, each of which takes approximately four hours to complete. For five Advance Notices, the total annual reporting burden for posting them to respondents' Web sites is 80 hours (4 designated clearing agencies × 5 Advance Notices per year × 4 hours per Web site posting). Respondents are required to update the postings of those Advance Notices that become effective, each of which takes approximately four hours to complete. The total annual reporting burden for updating Advance Notices on the respondents' Web sites is 80 hours (4 designated clearing agencies × 5 Advance Notices per year × 4 hours per Web site posting).

Pursuant to Rule 19b–4(n)(5), the respondents are also required to provide copies of all materials submitted to the Commission relating to an Advance Notice to the Board of Governors of the Federal Reserve System (''Board'') contemporaneously with such submission to the Commission, which is estimated to take two hours. The total annual reporting burden for designated clearing agencies to meet this requirement is 40 hours (4 designated clearing agencies × 5 Advance Notices per year × 2 hours per response).

The Commission estimates that three security-based swap clearing agencies will each submit 20 Security-Based Swap Submissions per year, with each submission taking 140 hours to complete resulting in a total annual reporting burden of 8,400 hours (3 respondent clearing agencies × 20 Security-Based Swap Submissions per year × 140 hours per response). Respondent clearing agencies are required to post all Security-Based Swap Submissions to their Web sites, each of which takes approximately four hours to complete. For 20 Security-Based Swap Submissions, the total annual reporting burden for posting them to the three respondents' Web sites is 240 hours (3 respondent clearing agencies × 20 Security-Based Swap Submissions per year × 4 hours per Web site posting). In addition, three clearing agencies that have not previously posted Security-Based Swap Submissions, Advance Notices, and proposed rule changes on their Web sites may need to update their existing Web sites to post such filings online. The Commission estimates that each of these three clearing agencies would spend approximately 15 hours updating its existing Web site, resulting in a total one-time burden of 45 hours (3 respondent clearing agencies × 15 hours per Web site update) or 15 hours annualized over three years.

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[1] 15 U.S.C. 78c(a)(26).

[2] For most of 2015, 34 SROs were registered. One registered SRO withdrew in December 2015 and one SRO newly registered with the Commission in January 2016. The Commission expects five additional respondents to register during the three-year period for which this PRA Extension is applicable (three as registered clearing agencies and two as national securities exchanges), bringing the total number of respondents to 39.

[3] For 34 SROs, 240 withdrawn filings equal approximately 7.06 filings per SRO. For 39 SROs, the figure would increase to 275 withdrawn filings.

[4] For 34 SROs, six disapproved filings equal approximately 0.18 filings per SRO. For 39 SROs, the figure would increase to seven disapproved filings.

Respondent clearing agencies will also have to provide training to staff members using the Electronic Form 19b–4 Filing System ("EFFS") to submit Security-Based Swap Submissions, Advance Notices, and/or proposed rule changes electronically. The Commission estimates that one anticipated security-based swap clearing agency will spend approximately 20 hours training all staff members who will use EFFS to submit Security-Based Swap Submissions, Advance Notices, and/or proposed rule changes electronically, or 6.7 hours annualized over three years. The Commission also estimates that one anticipated clearing agency will have a one-time burden of 130 hours to draft and implement internal policies and procedures for using EFFS to make these submissions, or 43.3 hours annualized over three years. The Commission estimates that each of the 39 respondents will spend 10 hours each year training new compliance staff members and updating the training of existing compliance staff members to use EFFS, for a total annual burden of 390 hours (39 respondent SROs × 10 hours).

In connection with Security-Based Swap Submissions, counterparties may apply for a stay from a mandatory clearing requirement under Rule 3Ca–1. The Commission estimates that each clearing agency will submit five applications for stays from a clearing requirement per year and it will take approximately 18 hours to retrieve, review, and submit each application. Thus, the total annual reporting burden for the Rule 3Ca–1 stay of clearing requirement would be 270 hours (3 respondent clearing agencies × 5 stay of clearing applications per year × 18 hours to retrieve, review, and submit the stay of clearing information).

Based on the above, the total estimated annual response burden pursuant to Rule 19b–4 and Form 19b–4 is the sum of the total annual reporting burdens for filing proposed rule changes, Advance Notices, and Security-Based Swap Submissions; training staff to file such proposals; drafting, modifying, and implementing internal policies and procedures for filing such proposals; posting each proposal on the respondents' Web sites; updating Web sites to enable posting of proposals; updating the respondents' online rulebooks to reflect the proposals that became effective; submitting copies of Advance Notices to the Board; and applying for stays from clearing requirements, which is 114,740 hours.

Compliance with Rule 19b–4 is mandatory. Information received in response to Rule 19b–4 shall not be kept confidential; the information collected is public information.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information under the PRA unless it displays a currently valid OMB control number.

The public may view background documentation for this information collection at the following Web site, *www.reginfo.gov.* Comments should be directed to: (i) Desk Officer for the Securities and Exchange Commission, Office of Information and Regulatory Affairs, Office of Management and Budget, Room 10102, New Executive Office Building, Washington, DC 20503, or by sending an email to: *Shagufta_Ahmed@omb.eop.gov;* and (ii) Pamela Dyson, Director/Chief Information Officer, Securities and Exchange Commission, c/o Remi Pavlik-Simon, 100 F Street NE., Washington, DC 20549, or by sending an email to: *PRA_Mailbox@sec.gov.* Comments must be submitted to OMB within 30 days of this notice.

Dated: August 19, 2016.

Brent J. Fields,

Secretary.

[FR Doc. 2016–20257 Filed 8–23–16; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–78617; File No. SR–FINRA–2015–054]

Self-Regulatory Organizations; Financial Industry Regulatory Authority, Inc.; Order Approving Rule Change as Modified by Amendment Nos. 1 and 2 To Adopt FINRA Capital Acquisition Broker Rules

August 18, 2016.

I. Introduction

On December 4, 2015, the Financial Industry Regulatory Authority, Inc. ("FINRA") filed with the Securities and Exchange Commission (the "Commission" or "SEC"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Exchange Act") [1] and Rule 19b–4 thereunder,[2] proposed rule change SR–FINRA–2015–054, pursuant to which FINRA proposed to adopt a rule set that would apply exclusively to firms that meet the definition of "capital acquisition broker" ("CAB") and that elect to be governed under this rule set (collectively, the "CAB rules").

The Commission published the proposed rule change for public comment in the **Federal Register** on December 23, 2015.[3] On January 28, 2016, FINRA extended the time period in which the Commission must approve the proposed rule change, disapprove the proposed rule change or institute proceedings to determine whether to approve or disapprove the proposed rule change to March 22, 2016. On March 17, 2016, the Commission instituted proceedings pursuant to Section 19(b)(2)(B) of the Exchange Act [4] to determine whether to approve or disapprove the proposed rule change.[5] The Commission received 18 comment letters on the proposal.[6]

In response to comments, on March 29, 2016 FINRA filed a partial amendment ("Amendment No. 1") to its proposed rule change to amend CAB Rule 016(c)(2) to clarify that the definition of "capital acquisition broker" does not include any broker or dealer that effects securities transactions that would require the broker or dealer to report the transaction under the FINRA Rules 6300 Series, 6400 Series, 6500 Series, 6600 Series, 6700 Series, 7300 Series or 7400 Series. The Commission published Amendment No. 1 for public comment in the **Federal Register** on April 15, 2016.[7] The Commission received one additional comment.[8]

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[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] Exchange Act Release No. 76675 (December 17, 2015), 80 FR 79969 (December 23, 2015) (Notice of Filing of File No. SR–FINRA–2015–054) ("Notice of Filing").

[4] 15 U.S.C. 78s(b)(2)(B).

[5] Exchange Act Release No. 77391 (March 17, 2016), 81 FR 15588 (March 23, 2016) (Order Instituting Proceedings To Determine Whether to Approve or Disapprove Proposed Rule Change to Adopt FINRA Capital Acquisition Broker Rules on File No. SR–FINRA–2015–054).

[6] Letters from Peter W. LaVigne, Esq., Chair, Securities Regulation Committee, Business Law Section, New York State Bar Association, dated January 22, 2016 ("New York Bar Association Letter"); Judith M. Shaw, President, North American Securities Administrators Association, Inc., dated January 15, 2016 ("NASAA Letter"); Timothy Cahill, President, Compass Securities Corporation, dated January 13, 2016; Mark Fairbanks, President, Foreside Distributors, dated January 13, 2016 ("Foreside Letter"); Dan Glusker, Perkins Fund Marketing, LLC, dated January 13, 2016; Steven Jafarzadeh, CAIA, Managing Director, CCO Partner, Stonehaven, dated January 13, 2016; Richard A. Murphy, Manager, North Bridge Capital LLC, dated January 13, 2016; Ron Oldenkamp, President, Genesis Marketing Group, dated January 13, 2016; Michael S. Quinn, Member and CCO, Q Advisors LLC, dated January 13, 2016 ("Q Advisors Letter"); Lisa Roth, President, Monahan & Roth, LLC, dated January 13, 2016 ("Roth Letter"); Howard Spindel, Senior Managing Director, and Cassondra E. Joseph, Managing Director, Integrated Management Solutions USA LLC, dated April 8, 2016 ("IMS Letter 1")and January 13, 2016 ("IMS Letter 2"); Sajan K. Thomas, President, and Stephen J. Myott, Chief Compliance Officer, Thomas Capital Group, Inc., dated January 13, 2016; Donna DiMaria, Chairman of the Board of Directors, and Lisa Roth, Board of Directors, Third Party Marketers Association, dated January 12, 2016 ("3PM Letter"); Frank P. L. Minard, Managing Partner, XT Capital Partners, LLC, dated January 12, 2016; Arne Rovell, Coronado Investments, LLC, dated January 6, 2016 ("Coronado Letter"); Daniel H. Kolber, President/CEO, Intellivest Securities, Inc., dated December 30, 2016 ("Intellivest Letter"); and Roger W. Mehle, Chairman and CEO, Achates Capital Advisors LLC, dated December 29, 2015 ("Achates Letter").

FINRA filed a second amendment on June 28, 2016 (''Amendment No. 2'') to amend proposed CAB Rule 016(c)(1)(F) regarding a CAB's authority to engage in qualifying, identifying, soliciting, or acting as a placement agent or finder in connection with unregistered securities transactions. The Commission published Amendment No. 2 for public comment in the **Federal Register** on July 7, 2016.[9] The Commission received one comment letter on Amendment No. 2.[10] FINRA responded to all of the comment letters on August 16, 2016.[11]

This order grants approval of the proposed rule change, as modified by Amendment Nos. 1 and 2.

II. Description of the Rule Change [12]

FINRA states that there are firms that are solely corporate financing firms that advise companies on mergers and acquisitions, advise issuers on raising debt and equity capital in private placements with institutional investors, or provide advisory services on a consulting basis to companies that need assistance analyzing their strategic and financial alternatives. FINRA explains that these firms often are registered as broker-dealers because of their activities and because they may receive transaction-based compensation as part of their services. Nevertheless, FINRA believes that these firms do not engage in many of the types of activities typically associated with traditional broker-dealers. For example, these firms typically do not carry or act as an introducing broker with respect to customer accounts, handle customer funds or securities, accept orders to purchase or sell securities either as principal or agent for the customer, exercise investment discretion on behalf of any customer, or engage in proprietary trading of securities or market-making activities. Therefore, FINRA proposed to create a separate rule set to apply to firms that meet the definition of CAB and elect to be governed under this rule set.

The proposed rules subject CABs to the FINRA By-Laws, as well as core FINRA rules that FINRA believes should apply to all of its members. The rule set applicable to CABs also includes other FINRA rules that are tailored to address CABs' business activities. A brief description of the rule set for CABs is included below.

A. General Standards

CAB Rule 014 provides that all persons that have been approved for membership in FINRA as a CAB and persons associated with CABs shall be subject to the CAB rules and the FINRA By-Laws (including the schedules thereto), unless the context requires otherwise. CAB Rule 015 provides that FINRA Rule 0150(b) shall apply to CABs. FINRA Rule 0150(b) provides that the FINRA rules do not apply to transactions in, and business activities relating to, municipal securities as that term is defined in the Exchange Act.

CAB Rule 016 sets forth basic definitions that apply to CABs. The proposed definitions of ''capital acquisition broker'' and ''institutional investor'' are particularly important to the application of the rule set. The term ''capital acquisition broker'' means any broker that solely engages in one or more of the following activities:

- Advising an issuer, including a private fund, concerning its securities offerings or other capital raising activities;
- advising a company regarding its purchase or sale of a business or assets or regarding its corporate restructuring, including a going-private transaction, divestiture or merger;
- advising a company regarding its selection of an investment banker;
- assisting in the preparation of offering materials on behalf of an issuer;
- providing fairness opinions, valuation services, expert testimony, litigation support, and negotiation and structuring services;
- qualifying, identifying, soliciting, or acting as a placement agent or finder (i) on behalf of an issuer in connection with a sale of newly-issued, unregistered securities to institutional investors or (ii) on behalf of an issuer or control person in connection with a change of control of a privately-held company. For purposes of this part, a ''control person'' is a person who has the power to direct the management or policies of a company through ownership of securities, by contract, or otherwise. Control will be presumed to exist if, before the transaction, the person has the right to vote or the power to sell or direct the sale of 25% or more of a class of voting securities or in the case of a partnership or limited liability company has the right to receive upon dissolution or has contributed 25% or more of the capital. Also, for purposes of this part, a ''privately-held company'' is a company that does not have any class of securities registered, or required to be registered, with the SEC under Section 12 of the Exchange Act or with respect to which the company files, or is required to file, periodic information, documents, or reports under Section 15(d) of the Exchange Act;[13] and
- effecting securities transactions solely in connection with the transfer of ownership and control of a privately-held company through the purchase, sale, exchange, issuance, repurchase, or redemption of, or a business combination involving, securities or assets of the company, to a buyer that will actively operate the company or the business conducted with the assets of the company, in accordance with the terms and conditions of an SEC rule, release, interpretation or ''no-action'' letter that permits a person to engage in such activities without having to register as a broker or dealer pursuant to Section 15(b) of the Exchange Act.[14]

A firm will be permitted to register as, or change its status to, a CAB *only* if the firm solely engages in one or more of these activities.

The term ''capital acquisition broker'' does not include any broker or dealer that:

- Carries or acts as an introducing broker with respect to customer accounts;
- holds or handles customers' funds or securities;
- accepts orders from customers to purchase or sell securities either as principal or as agent for the customer (except as permitted by paragraphs (c)(1)(F) and (G) of CAB Rule 016);

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[7] Exchange Act Release No. 77581 (April 11, 2016), 81 FR 22333 (April 15, 2016) (Notice of Filing of Partial Amendment No. 1 to Proposed Rule Change to Adopt FINRA Capital Acquisition Broker Rules) (''Notice of Amendment No.1'').

[8] *See* letter from Anonymous dated May 3, 2016 (stating ''Good'').

[9] Exchange Act Release No. 78220 (July 1, 2016), 81 FR 44372 (July 7, 2016) (Notice of Filing of Partial Amendment No. 2 to Proposed Rule Change to Adopt FINRA Capital Acquisition Broker Rules) (''Notice of Amendment No.2'').

[10] *See* letter from Kent J. Lund, SDR Capital Markets, Inc., dated July 15, 2016 (''SDR Letter'').

[11] *See* letter from Joseph Savage, FINRA, dated August 16, 2016 (''FINRA Response'').

[12] For a more detailed description of the proposed rule change, see the Notice of Filing, *supra* note 3, Notice of Amendment No.1, *supra* note 7, and Notice of Amendment No.2, *supra* note 9, which were substantially prepared by FINRA.

[13] *See* Notice of Amendment No.2, *supra* note 9, 81 FR at 44373 (amending this prong of the proposed definition of CAB). Originally, this prong of the definition of CAB included a broker ''qualifying, identifying, soliciting, or acting as a placement agent or finder with respect to institutional investors in connection with purchases or sales of unregistered securities.'' Notice of Filing, *supra* note 3, 80 FR at 79970.

[14] *See* CAB Rule 016(c)(1).

- has investment discretion on behalf of any customer;
- engages in proprietary trading of securities or market-making activities;
- participates in or maintains an online platform in connection with offerings of unregistered securities pursuant to Regulation Crowdfunding or Regulation A under the Securities Act of 1933; or
- effects securities transactions that will require the broker or dealer to report the transaction under the FINRA Rules 6300 Series, 6400 Series, 6500 Series, 6600 Series, 6700 Series, 7300 Series or 7400 Series.[15]

The term "institutional investor" has substantially the same meaning as that term has under FINRA Rule 2210 (Communications with the Public). The term includes any:

- Bank, savings and loan association, insurance company or registered investment company;
- governmental entity or subdivision thereof;
- employee benefit plan, or multiple employee benefit plans offered to employees of the same employer, that meet the requirements of Section 403(b) or Section 457 of the Internal Revenue Code and in the aggregate have at least 100 participants, but does not include any participant of such plans;
- qualified plan, as defined in Section 3(a)(12)(C) of the Exchange Act, or multiple qualified plans offered to employees of the same employer, that in the aggregate have at least 100 participants, but does not include any participant of such plans;
- other person (whether a natural person, corporation, partnership, trust, family office or otherwise) with total assets of at least $50 million;
- person meeting the definition of "qualified purchaser" as that term is defined in Section 2(a)(51) of the Investment Company Act of 1940 ("1940 Act"); and
- person acting solely on behalf of any such institutional investor.

B. FINRA Membership

The CAB Rule 100 Series sets forth the requirements for a firm that wishes to register as a CAB. The CAB Rule 100 Series generally incorporates by reference FINRA Rules 1010 (Electronic Filing Requirements for Uniform Forms), and 1122 (Filing of Misleading Information as to Membership or Registration), and NASD Rules 1011 (Definitions), 1012 (General Provisions), 1013 (New Member Application and Interview), 1014 (Department Decision), 1015 (Review by National Adjudicatory Council), 1016 (Discretionary Review by FINRA Board), 1017 (Application for Approval of Change in Ownership, Control, or Business Operations), 1019 (Application to Commission for Review), 1090 (Foreign Members), 1100 (Foreign Associates) and IM–1011–1 (Safe Harbor for Business Expansions). Accordingly, a CAB applicant will follow the same procedures for membership as any other FINRA applicant, with four modifications.

- First, an applicant for membership that seeks to qualify as a CAB will have to state in its application that it intends to operate solely as such.
- Second, in reviewing an application for membership as a CAB, the FINRA Member Regulation Department will consider, in addition to the standards for admission set forth in NASD Rule 1014, whether the applicant's proposed activities are consistent with the limitations imposed on CABs under CAB Rule 016(c).
- Third, CAB Rule 116(b) sets forth the procedures for an existing FINRA firm to change its status to a CAB. If an existing firm is already approved to engage in the activities of a CAB, and the firm does not intend to change its existing ownership, control or business operations, it will not be required to file either a New Member Application ("NMA") or a Change in Membership Application ("CMA"). Instead, the firm will be required to file a request to amend its membership agreement or obtain a membership agreement (if none exists currently) to provide that: (i) The firm's activities will be limited to those permitted for CABs under CAB Rule 016(c), and (ii) the firm agrees to comply with the CAB rules.[16]
- Fourth, CAB Rules 116(c) and (d) set forth the procedures for an existing CAB to terminate its status as such and continue as a FINRA firm. Under Rule 116(c), such a firm will be required to file a CMA with the FINRA Member Regulation Department, and to amend its membership agreement to provide that the firm agrees to comply with all FINRA rules.[17]

Under CAB Rule 116(d), however, if during the first year following an existing FINRA member firm's amendment to its membership agreement to convert a full-service broker-dealer to a CAB pursuant to Rule 116(b) a CAB seeks to terminate its status as such and continue as a FINRA member firm, the CAB may notify the FINRA Membership Application Program group of this change without having to file an application for approval of a material change in business operations pursuant to NASD Rule 1017. The CAB will instead file a request to amend its membership agreement to provide that the member firm agrees to comply with all FINRA rules, and execute an amended membership agreement that imposes the same limitations on the member firm's activities that existed prior to the member firm's change of status to a CAB.[18]

The CAB Rule 100 Series also governs the registration and qualification examinations of principals and representatives that are associated with CABs. These rules incorporate by reference NASD Rules 1021 (Registration Requirements—Principals), 1022 (Categories of Principal Registration), 1031 (Registration Requirements—Representatives), 1032 (Categories of Representative Registration), 1060 (Persons Exempt from Registration), 1070 (Qualification Examinations and Waiver of Requirements), 1080 (Confidentiality of Examinations), IM–1000–2 (Status of Persons Serving in the Armed Forces of the United States), IM–1000–3 (Failure to Register Personnel) and FINRA Rule 1250 (Continuing Education Requirements). Accordingly, CAB firm principals and representatives are subject to the same registration, qualification examination, and continuing education requirements as principals and representatives of other FINRA firms. CABs are also subject to FINRA Rule 1230(b)(6) regarding Operations Professional registration.

C. Conduct Rules (CAB Rule 200 Series)

The CAB Rule 200 Series establishes a streamlined set of conduct rules. CABs are subject to FINRA Rules 2010 (Standards of Commercial Honor and Principles of Trade), 2020 (Use of Manipulative, Deceptive or Other Fraudulent Devices), 2040 (Payments to Unregistered Persons), 2070 (Transactions Involving FINRA Employees), 2080 (Obtaining an Order of Expungement of Customer Dispute Information from the CRD System), 2081

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[15] *See* CAB Rule 016(c)(2). The original rule in the Notice of Filing was amended by Amendment No. 1, which clarified that CABs may engage in secondary transactions only if they are not subject to FINRA Rules 6300 Series, 6400 Series, 6500 Series, 6600 Series, 6700 Series, 7300 Series or 7400 Series. *See* Notice of Amendment No.1, *supra* note 7, 81 FR at 22333.

[16] There will not be an application fee associated with this request.

[17] Absent a waiver, such a firm will have to pay an application fee associated with the CMA. *See* FINRA By-Laws, Schedule A, Section 4(i).

[18] To the extent that the rules applicable to the member firm had been amended since it had changed its status to a CAB, FINRA will have the discretion to modify any limitations to reflect any new rule requirements.

(Prohibited Conditions Relating to Expungement of Customer Dispute Information), 2263 (Arbitration Disclosure to Associated Persons Signing or Acknowledging Form U4), and 2268 (Requirements When Using Predispute Arbitration Agreements for Customer Accounts).

CAB Rules 209 and 211 impose know-your-customer and suitability obligations similar to those imposed under FINRA Rules 2090 and 2111. CAB Rule 211(b) includes an exception to the customer-specific suitability obligations for institutional investors similar to the exception found in FINRA Rule 2111(b). CAB Rule 221 is an abbreviated version of FINRA Rule 2210 (Communications with the Public), essentially prohibiting false and misleading statements.

Under CAB Rule 240, if a CAB or associated person of a CAB has engaged in activities that require the CAB to register as a broker or dealer under the Exchange Act, and that are inconsistent with the limitations imposed on CABs under CAB Rule 016(c), FINRA could examine for and enforce all FINRA rules against such a broker-dealer or associated person, including any rule that applies to a FINRA member that is not a CAB or to an associated person who is not a person associated with a CAB.[19]

FINRA is not subjecting CABs to FINRA Rules 2121 (Fair Prices and Commissions), 2122 (Charges for Services Performed), and 2124 (Net Transactions with Customers). FINRA Rule 2121 provides that, for both listed and unlisted securities, a member that buys for its own account from its customer, or sells for its own account to its customer, shall buy or sell at a price that is fair, taking into consideration all relevant circumstances, including market conditions with respect to the security at the time of the transaction, the expense involved, and the fact that the member is entitled to a profit. Further, if the member acts as agent for its customer in any such transaction, the member shall not charge its customer more than a fair commission or service charge, taking into consideration all relevant circumstances, including market conditions with respect to the security at the time of the transaction, the expense of executing the order and the value of any service the member may have rendered by reason of its experience in and knowledge of such security and the market therefor.

A CAB is not permitted to act as principal in a securities transaction. Accordingly, the provisions of FINRA Rule 2121 that govern principal transactions do not apply to a CAB's permitted activities. However, CABs are permitted to qualify, identify, solicit or act as placement agent or finder in a securities transaction, although only in very narrow circumstances on behalf of an issuer in connection with a sale of newly-issued, unregistered securities to institutional investors or on behalf of an issuer or control person in connection with a change of control of a privately-held company. CABs also are permitted to effect securities transactions solely in connection with the transfer of ownership and control of a privately-held company to a buyer that will actively operate the company or the business conducted with the assets of the company in accordance with the terms and conditions of an SEC rule, release, interpretation or "no-action" letter. FINRA believes that these narrow circumstances either involve institutional parties that are generally capable of negotiating fair prices, or involve the sale of a business as a going concern, which differ in nature from the types of transactions that typically raise issues under FINRA Rule 2121.[20]

FINRA Rule 2122 provides that charges, if any, for services performed, including, but not limited to, miscellaneous services such as collections due for principal, dividends, or interest; exchange or transfer of securities; appraisals, safekeeping or custody of securities, and other services shall be reasonable and not unfairly discriminatory among customers. FINRA believes that CABs typically provide services to institutional customers that are capable of negotiating reasonable service charges.[21] Moreover, CABs are not permitted to provide many of the services listed in Rule 2122, such as collecting principal, dividends or interest, or providing safekeeping or custody services.

FINRA Rule 2124 sets forth specific requirements for executing transactions with customers on a "net" basis. "Net" transactions are defined as a type of principal transaction, and CABs may not trade securities on a principal basis. Thus, FINRA does not believe it is necessary to include FINRA Rule 2124 as part of the CAB rule set.

Notwithstanding the foregoing, CAB Rule 201 will subject CABs to FINRA Rule 2010 (Standards of Commercial Honor and Principles of Trade), which requires a member, in the conduct of its business, to observe high standards of commercial honor and just and equitable principles of trade. FINRA notes that, depending on the facts, CAB Rule 201 may apply in situations in which a CAB charged a commission or fee that clearly is unreasonable under the circumstances.

D. Supervision and Responsibilities Related to Associated Persons (CAB Rule 300 Series)

The CAB Rule 300 Series establishes a limited set of supervisory rules for CABs. CABs are subject to FINRA Rules 3220 (Influencing or Rewarding Employees of Others), 3240 (Borrowing from or Lending to Customers), and 3270 (Outside Business Activities of Registered Persons).

CAB Rule 311 subjects CABs to some, but not all, of the requirements of FINRA Rule 3110 (Supervision) and, consistent with Rule 3110, is designed to provide CABs with the flexibility to tailor their supervisory systems to their business models. CABs are subject to the provisions of Rule 3110 concerning the supervision of offices, personnel, customer complaints, correspondence and internal communications. However, CABs are not subject to the provisions of Rule 3110 that require annual compliance meetings (paragraph (a)(7)), review and investigation of transactions (paragraphs (b)(2) and (d)), specific documentation and supervisory procedures for supervisory personnel (paragraph (b)(6)), and internal inspections (paragraph (c)).

FINRA does not believe that the annual compliance meeting requirement in FINRA Rule 3110(a)(7) should apply to CABs given the nature of their business model and structure. FINRA has observed that most current FINRA member firms that would qualify as CABs tend to be small and often operate out of a single office. In addition, the range of rules that CABs are subject to is narrower than the rules that apply to other broker-dealers. Moreover, as noted above, CABs are subject to both the Regulatory and Firm Element continuing education requirements. Accordingly, FINRA does not believe that CABs need to conduct an annual compliance meeting as required under FINRA Rule 3110(a)(7). The fact that the annual compliance meeting requirement does not apply to CABs or their associated persons is in no way intended to reduce their responsibility to have knowledge of and comply with applicable securities laws and regulations and the CAB rule set.

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[19] FINRA states that the purpose of this rule is to clarify that the full FINRA Rulebook would apply if a CAB engages in broker-dealer activities that are inconsistent with the limitations imposed on CABs. FINRA believes that, without CAB Rule 240, it might be unclear which rules would apply to a firm that elected CAB status and yet engaged in brokerage activities that are impermissible for a CAB. *See* FINRA Response, *supra* note 11, at 18.

[20] *See* FINRA Response, *supra* note 11, at 16.

[21] *Id.*

FINRA also does not believe that FINRA Rule 3110(b)(2), which requires members to adopt and implement procedures for the review by a registered principal of all transactions relating to the member's investment banking or securities business, or FINRA Rule 3110(d), which imposes requirements related to the investigation of securities transactions and heightened reporting requirements for members engaged in investment banking services, should apply to CABs. CABs are not permitted to carry or act as an introducing broker with respect to customer accounts, hold or handle customers' funds or securities, accept orders from customers to purchase or sell securities (except as permitted by CAB Rule 016(c)(1)(F) and (G)), have investment discretion on behalf of any customer, engage in proprietary trading or market-making activities, or participate in Crowdfunding or Regulation A securities offerings. Accordingly, due to these restrictions, FINRA does not believe a CAB's business model necessitates the application of these provisions, which primarily address trading and investment banking functions that are beyond the permissible scope of a CAB's activities.

FINRA also does not believe that the requirements of FINRA Rule 3110(b)(6) should apply to CABs. Paragraph (b)(6) generally requires a member to have procedures to prohibit its supervisory personnel from: (1) Supervising their own activities; and (2) reporting to, or having their compensation or continued employment determined by, a person the supervisor is supervising.[22] In addition, FINRA does not believe that FINRA Rule 3110(c), which requires members to conduct internal inspections of their businesses, should apply to CABs.

FINRA believes that it is providing CABs with flexibility to tailor their supervisory structures to their business model, which is geared toward acting as a consultant in capital acquisition transactions, qualifying, identifying, soliciting or acting as placement agent or finder in a securities transaction solely on behalf of an issuer in connection with a sale of newly-issued, unregistered securities to institutional investors or on behalf of an issuer or a control person in connection with a change of control of a privately-held company, or with the transfer of ownership and control of a privately-held company. As discussed above, many CABs operate out of a single office with a small staff, which reduces the need for internal inspections of numerous or remote offices. In addition, part of the purpose of creating a separate CAB rule set is to streamline and reduce existing FINRA rule requirements where doing so does not hinder investor protection. FINRA believes that the remaining provisions of FINRA Rule 3110, coupled with the CAB Rule 200 Series addressing duties and conflicts will sufficiently protect CABs' customers from potential harm due to insufficient supervision.

CAB Rule 313 requires CABs to designate and identify one or more principals to serve as a firm's chief compliance officer ("CCO"), similar to the requirements of FINRA Rule 3130(a). FINRA Rule 3130 requires a CAB to have its chief executive officer ("CEO") certify that the member has in place processes to establish, maintain, review, test and modify written compliance policies and written supervisory procedures reasonably designed to achieve compliance with applicable federal securities laws and regulations, and FINRA and MSRB rules, which are required under FINRA Rules 3130(b) and (c). FINRA does not believe the CEO certification is necessary given a CAB's narrow business model and smaller rule set.

CAB Rule 328 prohibits any person associated with a CAB from participating in any manner in a private securities transaction as defined in FINRA Rule 3280(e).[23] FINRA does not believe that an associated person of a CAB should be engaged in selling securities away from the CAB, nor should a CAB have to oversee and review such transactions, given its limited business model. This restriction does not prohibit associated persons from investing in securities on their own behalf, or engaging in securities transactions with immediate family members, provided that the associated person does not receive selling compensation.

CAB Rule 331 requires each CAB to implement a written anti-money laundering ("AML") program. FINRA believes that this is consistent with the SEC's requirements and Chapter X of Title 31 of the Code of Federal Regulations. Accordingly, CAB Rule 331 is similar to FINRA Rule 3310 (Anti-Money Laundering Compliance Program); however, the CAB rule contemplates that all CABs will be eligible to conduct the required independent testing for compliance every two years (rather than annually as FINRA Rule 3310 requires of non-CAB members).

E. Financial and Operational Rules (CAB Rule 400 Series)

The CAB Rule 400 Series establishes a streamlined set of rules concerning firms' financial and operational obligations. CABs are subject to FINRA Rules 4140 (Audit), 4150 (Guarantees by, or Flow through Benefits for, Members), 4160 (Verification of Assets), 4511 (Books and Records—General Requirements), 4513 (Records of Written Customer Complaints), 4517 (Member Filing and Contact Information Requirements), 4524 (Supplemental FOCUS Information), 4530 (Reporting Requirements), and 4570 (Custodian of Books and Records). Under CAB Rule 411, which is modeled after FINRA Rule 4110, CABs are required to suspend business operations during any period a firm is not in compliance with the applicable net capital requirements set forth in Exchange Act Rule 15c3–1, and CAB Rule 411 also authorizes FINRA to direct a CAB to suspend its operation under those circumstances.[24] The CAB rules also set forth requirements concerning withdrawal of capital, subordinated loans, notes collateralized by securities, and capital borrowings.

Because CABs may not carry or act as an introducing broker with respect to customer accounts, they will have more limited customer information requirements than those imposed under FINRA Rule 4512.[25] Pursuant to CAB Rule 451, CABs will have to maintain each customer's name and residence, whether the customer is of legal age (if applicable), and the names of any persons authorized to transact business on behalf of the customer. CABs will still have to make and preserve all books and records required under Exchange Act Rules 17a–3 and 17a–4.[26] CABs are subject to a limited set of requirements for the supervision and review of a firm's general ledger accounts.[27]

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[22] FINRA Rule 3110(b)(6)(C)(i) and (ii). FINRA Rule 3110(b)(6) also requires that a member's supervisory procedures include the titles, registration status and locations of the required supervisory personnel and the responsibilities of each supervisory person as these relate to the types of business engaged in, applicable securities laws and regulations, and FINRA rules, as well as a record of the names of its designated supervisory personnel and the dates for which such designation is or was effective. FINRA Rule 3110(b)(6)(A) and (B). In addition, paragraph (b)(6) requires a member to have procedures reasonably designed to prevent the standards of supervision required pursuant to FINRA Rule 3110(a) from being compromised due to the conflicts of interest that may be present with respect to an associated person being supervised. FINRA Rule 3110(b)(6)(D).

[23] FINRA Rule 3280(e) defines "private securities transaction" as "any securities transaction outside the regular course or scope of an associated person's employment with a member, including, though not limited to, new offerings of securities which are not registered with the Commission, provided however that transactions subject to the notification requirements of NASD Rule 3050, transactions among immediate family members (as defined in FINRA Rule 5130), for which no associated person receives any selling compensation, and personal transactions in investment company and variable annuity securities, shall be excluded."

[24] *See* CAB Rule 411.

[25] *See* CAB Rule 451(b).

CABs are not subject to FINRA Rules 4370 (Business Continuity Plans and Emergency Contact Information) or 4380 (Mandatory Participation in FINRA BC/DR Testing under Regulation SCI). FINRA does not believe it is necessary to have a rule requiring a CAB to maintain a business continuity plan ("BCP"), given a CAB's limited activities, particularly since a CAB will not engage in retail customer transactions or clearance, settlement, trading, underwriting or similar investment banking activities. FINRA Rule 4380 relates to Rule SCI under the Exchange Act, which is not applicable to a member that limits its activities to those permitted under the CAB rule set.

F. Securities Offerings (CAB Rule 500 Series)

The CAB Rule 500 Series subjects CABs to FINRA Rules 5122 (Private Placements of Securities Issued by Members) and 5150 (Fairness Opinions).

G. Investigations and Sanctions, Code of Procedure, and Arbitration and Mediation (CAB Rules 800, 900 and 1000)

CAB Rule 800 provides that CABs are subject to the FINRA Rule 8000 Series governing investigations and sanctions of firms, other than FINRA Rules 8110 (Availability of Manual to Customers), 8211 (Automated Submission of Trading Data Requested by FINRA), and 8213 (Automated Submission of Trading Data for Non-Exchange-Listed Securities Requested by FINRA).

CABs are not subject to FINRA Rule 8110 (Availability of Manual to Customers), which requires members to make available a current copy of the FINRA manual for examination by customers upon request. FINRA represents that it will make the CAB rule set available through the FINRA Web site. Accordingly, FINRA does not believe this rule is necessary for CABs.

CABs also are not subject to FINRA Rules 8211 (Automated Submission of Trading Data Requested by FINRA) or 8213 (Automated Submission of Trading Data for Non-Exchange-Listed Securities Requested by FINRA). Given that these rules are intended to assist FINRA in requesting trade data from firms engaged in securities trading, and that CABs will not engage in securities trading, FINRA does not believe that these rules should apply to CABs.

CAB Rule 900 provides that CABs are subject to the FINRA Rule 9000 Series governing disciplinary and other proceedings involving firms, other than the FINRA Rule 9700 Series (Procedures on Grievances Concerning the Automated Systems). CAB Rule 900(c) provides that any CAB may be subject to a fine under FINRA Rule 9216(b) with respect to an enumerated list of FINRA By-Laws, CAB rules and SEC rules under the Exchange Act. CAB Rule 900(d) authorizes FINRA staff to require a CAB to file communications with the FINRA Advertising Regulation Department at least ten days prior to use if the staff determined that the CAB had departed from CAB Rule 221's standards.[28]

CAB Rule 1000 provides that CABs are subject to the FINRA Rule 12000 Series (Code of Arbitration Procedure for Customer Disputes), 13000 Series (Code of Arbitration Procedure for Industry Disputes) and 14000 Series (Code of Mediation Procedure).

FINRA states that if the Commission approves the rule change it will announce the implementation date of the rule change in a *Regulatory Notice* to be published no later than 60 days following Commission approval, and that such date will be no later than 180 days following publication of the *Regulatory Notice.*

III. Discussion of Comment Letters, FINRA's Response and Commission Findings

After careful review of the proposed rule change, the comment letters, and FINRA's response to the comments, the Commission finds that the rule change, as modified by Amendment Nos. 1 and 2, is consistent with the requirements of the Exchange Act and the rules and regulations thereunder that are applicable to a national securities association.[29] Specifically, the Commission finds that the rule change is consistent with Section 15A(b)(6) of the Exchange Act,[30] which requires, among other things, that FINRA rules be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest.

The Commission received a total of twenty comment letters and FINRA's response to those comment letters. Commenters were generally supportive of the proposal but had suggestions regarding areas where certain aspects of the proposal could be expanded or further explained.[31] The Commission has considered the commenters' suggestions and FINRA's response and believes, as discussed below, that the CAB rules as amended are reasonably designed to provide flexibility for CABs, while providing for protection of investors and the public interest consistent with Section 15A(b)(6) of the Exchange Act.[32]

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[26] *See* CAB Rule 900(c).

[27] *See* CAB Rule 452(a).

[28] CAB Rule 221 states that: (a) No communication with the public by a capital acquisition broker may: (1) Include any false, exaggerated, unwarranted, promissory or misleading statement or claim; (2) omit any material fact or qualification if the omission, in light of the context of the material presented, would cause the communication to be misleading; (3) state or imply that FINRA, or any other corporate name or facility owned by FINRA, or any other regulatory organization endorses, indemnifies, or guarantees the capital acquisition broker-dealer's business practices; or (4) imply that past performance will recur or make any exaggerated or unwarranted claim, opinion or forecast. Further, the rule requires that all communications by a capital acquisition broker must be based on principles of fair dealing and good faith, must be fair and balanced, and must provide a sound basis for evaluating the facts in regard to any particular security or type of security, industry, or service.

[29] In approving this rule change, the Commission has considered the rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[30] 15 U.S.C. 78o–3(b)(6).

[31] Several commenters request certain changes to SEC rules and other requirements that apply to CABs, including, for example, eliminating financial responsibility rules, net capital requirements, Securities Investor Protection Corporation requirements and financial audits for CABs. *See generally* Achates Letter, *supra* note 6; Q Advisors Letter, *supra* note 6; 3PM Letter, *supra* note 6; and IMS Letter 1, *supra* note 6. FINRA responds that such changes are outside its authority. Further, the Commission believes that such changes are also outside the scope of the proposed rule change, and thus, we are not proposing to amend these requirements at this time.

[32] One commenter suggests that the Commission, FINRA, and NASAA should cooperate to more fully analyze the interaction between the CAB proposal and state registration requirements to better harmonize the application of these provisions. *See* NASAA Letter. This commenter suggests that the most relevant provisions of the CAB rule set is CAB Rule 016(c)(1)(G) (*i.e.,* mergers and acquisition brokers). The commenter indicates that it will welcome the opportunity to work with FINRA and the Commission on the issues presented by the proposal (including related to mergers and acquisitions brokers), and encourages the Commission to delay approval of the proposed rule change until there has been an opportunity to more fully explore these issues.

In response, FINRA states that it disagrees that the SEC should delay acting on the CAB proposal. FINRA notes that the definition of CAB will permit CABs to engage, among other activities, in mergers and acquisition transactions. While FINRA acknowledges that NASAA has adopted a model rule for mergers and acquisition brokers, it does not believe that any differences between the NASAA model rule and the CAB rules should preclude the SEC from approving its proposal. *See* FINRA Response, *supra* note 11, at 27.

The Commission notes that approval of FINRA's proposed rule change will not preclude further coordination and discussion with FINRA and NASAA.

A. General Standards and FINRA Membership

1. By-laws

CAB Rule 014 requires that all persons that have been approved for membership in FINRA as a CAB and their associated persons shall be subject to the CAB rules and FINRA By-Laws (including the schedules thereto) "unless the context requires otherwise." CAB Rule 014 also states that the terms used in the CAB rules, if defined in the FINRA By-Laws, shall have the same meaning as defined in the FINRA By-Laws, unless a term is defined differently in a CAB rule, "or unless the context of a term within a Capital Acquisition Broker Rule requires a different meaning." [33]

One commenter expresses concern that there is no guidance as to what "context" may "require otherwise" and when and under what circumstances. This commenter suggests that this language sets up an interpretive issue and will make it impossible to advise a client as to what the actual definition is and, more significantly, whether it applies in a particular context.[34] In response, FINRA states that, as a general matter, the FINRA By-Laws' provisions would apply as written, without the need to interpret them differently as applied to CABs. FINRA states that there may be on occasion situations in which reading a By-Law provision literally would lead to a clearly incorrect result, due to the differences between the CAB Rules and other FINRA Rules governing non-CAB firms. FINRA does not believe that this qualification for context creates an interpretive issue, nor would it be impossible to advise clients on how to comply with the FINRA By-Laws. FINRA also explains that the Commission approved similar qualifying language regarding application of the FINRA By-Laws in the recently adopted Funding Portal Rules.[35]

2. Review of Membership Application

CAB Rules 101 through 115 generally apply the same standards for new member applications by CAB applicants as those that apply to non-CAB FINRA member firm applicants. CAB Rule 116 generally applies the same standards regarding changes in ownership, control or business operations to CABs as those that apply to non-CAB firms.[36] One commenter suggests that FINRA should approve the membership applications of new CABs within 60 days of the filing of the application (instead of 180 days as provided for in CAB Rule 113), provided that certain conditions are met, including: A completed application; the required supervisory principals, who have each taken and passed the applicable examinations; and no significant disciplinary history or other red flag indications of potential compliance problems.[37]

In response, FINRA states that it does not agree that it should revise its proposed rules to require it to act on a CAB's NMA within 60 days of filing an application that meets certain conditions.[38] FINRA believes that its Membership Application Program staff often will need more than 60 days to conduct a proper investigation of an applicant and complete other tasks associated with broker-dealer applications, such as a membership interview.[39]

3. Grace Period

CAB Rule 116 provides that if during the first year following an existing FINRA member's amendment electing to become a CAB the firm seeks to terminate its status as such and continue as a full FINRA member, the CAB may notify FINRA of this change without having to file an application for approval of a material change in business operations. One commenter states its view that this one-year grace period is not a sufficient amount of time for a firm to determine if CAB status is appropriate for its business model.[40] The commenter believes its view that a converted firm may not have sufficient data within the first year to evaluate its decision fully, and recommends that this grace period be extended to at least 24 months or that there be no grace time restrictions at all.[41] This commenter also suggests that FINRA allow interim continued operations as a CAB (provided the firm is in regulatory compliance) while an active CMA is being reviewed by FINRA, with the firm remaining subject to all the CAB rules pending a final decision by FINRA on the CMA.[42] Another commenter recommends that FINRA consider a grace period for firms that unintentionally conduct activities beyond the scope of a CAB's permissible activities.[43]

In response, FINRA states that it does not believe that the grace period during which a CAB may revert back to its prior non-CAB status should be lengthened.[44] FINRA believes that 12 months will give CABs sufficient time to make the determination of whether this status works for a firm's business model. FINRA states that a CAB may still change its status to a full FINRA member firm after 12 months by filing a CMA. However, FINRA agrees that a CAB that determines to terminate its status as such and revert back to a non-CAB firm should be permitted to continue to operate as a CAB while its CMA or application to amend its membership agreement is pending, barring unusual circumstances.[45] With respect to a grace period for impermissible activities, FINRA states that it does not believe it is necessary.[46] FINRA believes that unintentional violations of the CAB rules are best handled through the examination and enforcement process on a case-by-case basis. FINRA believes it may be useful to provide additional guidance to CABs concerning the scope of permissible activities, and may do so through FAQs or other means.[47]

After reviewing the CAB rules relating to the application of the FINRA By-laws and membership application process, the Commission believes that these rules are consistent with Section 15A(b)(6), in particular the requirements that FINRA's rules be reasonably designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest. In particular, given the limited activity of CABs, the Commission believes that it is reasonable for FINRA to provide a certain amount of flexibility through the use of the concept "unless the context otherwise requires" in the application of the By-laws and the definitions within the By-laws to CABs and the CAB Rules, so as to provide for a certain amount of flexibility if needed. The Commission notes that FINRA has committed to work with its members if interpretive issues arise. The Commission also believes it is reasonable for FINRA to provide for the same amount of time for approval of new CAB member applications as for non-CAB applications, to help ensure that FINRA has sufficient time to engage in its new member application process. In addition, the Commission believes FINRA's determination that a one year grace period for a firm to revert back to full member status is reasonably designed to provide a sufficient amount of time for a firm to determine whether CAB status makes sense for the firm, while not providing too long of a period without requiring the protections of going through the full membership process.[48] With respect to a grace period for impermissible activities, the Commission believes that it is appropriate for FINRA to address unintentional violations of the CAB rules through its examination and enforcement process on a case-by-case basis, and notes that FINRA states that it may provide additional guidance to CABs concerning the scope of permissible activities.

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[33] CAB Rule 014.

[34] *See* IMS Letter 2, *supra* note 6, at 3.

[35] *See* FINRA Funding Portal Rule 100(a).

[36] *See* NASD Rule 1017 (Application for Approval of Change in Ownership, Control or Business Operations).

[37] *See* New York State Bar Association Letter, *supra* note 6, at 1.

[38] *See* FINRA Response, *supra* note 11, at 14.

[39] *Id.*

[40] *Id.*

[41] *See* IMS Letter 1, *supra* note 6, at 11.

[42] *Id.*

[43] *See* 3PM Letter, *supra* note 6, at 3.

[44] *See* FINRA Response, *supra* note 11, at 14.

[45] *Id.*

[46] *Id.*

[47] *Id.* at 19.

B. Registration and Licensing

The CAB Rule 100 Series incorporates various NASD rules relating to the registration and qualification examinations of principals and representatives associated with CABS. Thus CAB firm principals and representatives are subject to the same registration, qualification examinations, and continued requirements as that of non-CAB FINRA member firms. One commenter suggests that FINRA should establish new examinations specifically for the registered representatives and supervisory principals of CABs that would test only that subject matter relevant to the business of CABs.[49] In response, FINRA states that it believes it is premature to establish new examinations at this point and may monitor the need in the future.[50]

Two commenters request that FINRA clarify whether CABs may hold all registration and licenses previously attained by their associated persons, including Series 53, 4 and other licenses.[51] One of these commenters also suggests that CABs should not be subject to FINRA Rule 1230(b)(6)[52] regarding Operations Professional registration because of the scope and nature of the examination.[53] In addition, the other commenter suggests that FINRA should exempt a CAB CCO from FINRA's proposed requirement[54] to obtain and maintain the Series 14 CCO license because of the broad and comprehensive scope of the proposed license.[55]

In response, FINRA states that associated persons of CABs will only be permitted to retain registrations and licenses that are appropriate to their functions.[56] FINRA notes that this standard applies to non-CAB member firms as well as to CABs. Further, FINRA does not agree that CABs should be exempt from FINRA Rule 1230(b)(6).[57] FINRA believes that many of the functions for which an Operations Professional is responsible apply to all types of broker-dealers, including CABs. For example, FINRA states that firm account management and reconciliation, maintaining a general ledger and treasury, and preparing and filing regulatory reports apply to CABs as well as other broker-dealers. Accordingly, FINRA declines to eliminate this requirement for CABs. FINRA also states that given that its contemplated proposal to put in place an examination for CCOs is still under review at FINRA, and subject to filing with the SEC, it is premature to exempt CABs from this proposal.[58]

The Commission believes that it is reasonable for FINRA to first assess the potential need for new examinations specific to CAB activities before determining whether such action is necessary or appropriate, particularly given that associated persons of CABs will be subject to existing FINRA examination requirements that apply to all members, including CABs, to the extent they apply to their CAB activities and functions. In this regard, the Commission agrees that it is reasonable to subject CABs to the FINRA operations professional registration rules, given that many of the functions for which an operations professional is responsible would apply to all types of FINRA member firms, including CABs. Likewise, the Commission believes that it is reasonable for FINRA to apply the same standard regarding the retention of licenses by associated persons to CAB member firms and non-CAB member firms. Thus, the Commission believes that the CAB registration and licensing rules are consistent with requirements in Section 15A(b)(6) of the Exchange Act that an association's rules be reasonably designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest.

C. Scope of CAB Permitted Activities

1. Secondary Market Transactions

As initially filed with the Commission, FINRA's definition of a CAB in Rule 016(c) would have included, among the permissible activities of a CAB, "qualifying, identifying, soliciting, or acting as a placement agent or finder with respect to institutional investors in connection with purchases or sales of unregistered securities." One commenter interpreted that description as including both primary issuances and secondary transactions in unregistered securities and requested that FINRA confirm the intent to include secondary transactions among the permitted activities of a CAB.[59] Another commenter noted that the definition appears to permit CABs to act as agent in the purchase or sale of debt, equity and equity-linked instruments, and not solely one category of securities.[60] One commenter supported the definition in its original form.[61]

Due to concerns that permitting CABs to act as agent in a wide array of secondary market transactions would be inconsistent with the purpose of its proposed rule set, FINRA subsequently amended proposed CAB Rule 016(c)(1)(F) to narrow the range of permitted secondary market activities.[62]

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[48] In response to another comment, the Commission notes that FINRA agrees that a CAB that determines to terminate its status as such and revert back to a non-CAB firm should be permitted to continue to operate as a CAB while its CMA or application to amend its membership agreement is pending, barring unusual circumstances.

[49] *See* New York State Bar Association Letter, *supra* note 6, at 2.

[50] *See* FINRA Response, *supra* note 11, at 27.

[51] *See* 3PM, *supra* note 6, at 2 and Roth Letter, *supra* note 6, at 1.

[52] FINRA Rule 1230 requires that each of the following persons be registered with FINRA as an Operations Professional: (i) Senior management with direct responsibility over the covered functions under the Rule; (ii) Any person designated by senior management under the Rule as a supervisor, manager or other person responsible for approving or authorizing work, including work of other persons, in direct furtherance of each of the covered functions in the Rule, as applicable, provided that there is sufficient designation of such persons by senior management to address each of the applicable covered functions; and (iii) Persons with the authority or discretion materially to commit a member's capital in direct furtherance of the covered functions in the Rule or to commit a member to any material contract or agreement (written or oral) in direct furtherance of the covered functions in the Rule.

[53] *See* 3PM Letter, *supra* note 6, at 2.

[54] FINRA is separately considering a proposal to establish a new stand-alone registration category for compliance officers. Before it would implement such a proposal, FINRA would need to file a notice with the Commission, which would be subject to review and comment.

[55] *See* Roth Letter, *supra* note 6, at 1.

[56] *See* FINRA Response, *supra* note 11, at 15.

[57] *Id.*

[58] *Id.*

[59] *See* New York State Bar Association Letter, *supra* note 6, at 2.

[60] *See* Q Advisors Letter, *supra* note 6, at 1.

[61] *See* 3PM Letter, *supra* note 6, at 1–2.

[62] *See* Notice of Amendment No. 2, *supra* note 9, 81 FR at 44372–44373. Prior to Amendment No. 2, FINRA also amended the scope in Amendment No. 1 to clarify that the definition of "capital acquisition broker" does not include any broker or dealer that effects securities transactions that would

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As amended, a CAB will be permitted to engage in qualifying, identifying, soliciting, or acting as a placement agent or finder (i) on behalf of an issuer in connection with a sale of newly-issued, unregistered securities to institutional investors or (ii) on behalf of an issuer or a control person in connection with a change of control of a privately-held company.

In response to Amendment No. 2, one commenter states its view that CAB Rule 016(c)(1)(F) should expressly permit CABs to engage in secondary market transactions.[63] The commenter suggests that CABs should be permitted to sell subsequent to a private placement any securities that the CAB receives as compensation for acting as a placement agent in a private placement securities transaction. The commenter also recommends that CABs be permitted to act as agent to assist the owner of securities purchased in a private placement to sell them subsequent to such private placement. The commenter suggests that it is common for placement agents to receive compensation in the form of restricted stock, options or warrants, and for the owner of securities purchased in a private placement to desire sometime later to sell those securities in a private secondary market transaction. The commenter argues that, without its recommended changes, it is likely many firms will decline to elect CAB status due to fears of engaging in impermissible activities.

In response, FINRA states that it does not believe that proposed CAB Rule 016(c)(1)(F) should be amended. FINRA states that other provisions of the proposal that preceded the filing of Amendment No. 2 would prohibit some of the activities that the commenter recommends. FINRA further explains that allowing a CAB to dispose of securities that it receives as compensation for placement agent services would likely be inconsistent with the prohibition on a CAB engaging in proprietary trading, and could be interpreted as allowing trading activities that do not fall within a CAB's business model. FINRA states that the definition of a CAB also prohibits a CAB from holding or handling customer funds or securities. To the extent that a CAB handles a customer's stock certificate as part of its services, a CAB could not act as agent on behalf of an owner who is disposing of privately placed securities. FINRA states that amending these various provisions to accommodate these activities at this time would not be prudent, particularly given the risk that these amendments would inadvertently allow some firms that do not fall within the intended business model to elect CAB status. FINRA states that it will consider proposed changes to the CAB rules after FINRA and the industry have gained experience with their application to CABs.

2. Prohibition on Private Securities Transactions

One commenter objects to CAB Rule 328 (Prohibition on Private Securities Transactions) [64] on the grounds that a CAB should be permitted to set its own policies to supervise private securities transactions.[65] Another commenter suggests that FINRA revise CAB Rule 328 to allow: (1) The investment advisory activities of associated persons of CABs who are also employees or supervised persons of an investment adviser registered with the SEC or a state ("RIA"); and (2) associated persons of CABs to be employees of a bank or trust company engaged in securities or advisory activities that a bank may engage in pursuant to the exceptions from the definition of broker or dealer in Exchange Act Sections 3(a)(4) or (5) or Regulation R.[66]

In response, FINRA states that it does not agree that CAB Rule 328 should be revised to allow activities to be engaged in by associated persons in their capacities as RIA or bank employees, nor does it believe CABs should be allowed to supervise private securities transactions as a business decision.[67] FINRA notes that CABs will engage only in a limited range of institutional securities activities, generally involving either advice to companies and issuers regarding private equity or merger and acquisition transactions, or acting as agent on behalf of an issuer in connection with a sale of newly-issued, unregistered securities to institutional investors or on behalf of an issuer or a control person in connection with a change of control of a privately-held company.[68] Given the limited nature of CABs' permissible business activities, FINRA believes that CABs generally will not be well positioned to supervise and keep records of private securities transactions, particularly if a CAB employee conducted business with retail investors through an RIA or bank. Accordingly, FINRA believes that the prohibitions in Rule 328 should remain as proposed.

3. Prohibition on CABs Chaperoning Foreign Broker-Dealers

One commenter suggests that FINRA should allow CABs to chaperone foreign associated persons under Exchange Act Rule 15a–6, since other broker-dealers that are subject to a $5,000 net capital requirement are permitted to engage in this activity.[69] In response, FINRA states that it does not agree that CABs should be permitted to engage in chaperoning activities under Exchange Act Rule 15a–6.[70] FINRA notes that the CAB rule set did not contemplate that CABs will engage in these activities, and FINRA does not believe that most firms that would consider registering as a CAB currently engage in them. As such, FINRA declines to make this change.

4. Permitted Activities With Institutional Investors

One commenter suggests that the definition of a CAB is problematic because it allows CABs to provide services only to institutional investors as defined by the proposal, which it believes is too restrictive.[71] Two commenters also object to the definition of institutional investor because it does not include accredited investors as defined under Securities Act Regulation D.[72] Noting that FINRA had stated it purposefully did not propose to define "institutional investor" to include accredited investors due to serious concerns with the manner in which firms market and sell private placements to accredited investors, one of these commenters recommends that FINRA should address any potential sales practice problems by incorporating any other rules needed for this purpose, rather than prohibiting the solicitation of accredited investors.[73] Another commenter suggests that FINRA consider lowering the threshold for institutional investors preferably to $5 million or less.[74] This commenter also suggests that many issuers may have less than $50 million in assets but are otherwise sophisticated, knowledgeable and advised by competent attorneys.[75]

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require the broker or dealer to report the transaction under the FINRA Rules 6300 Series, 6400 Series, 6500 Series, 6600 Series, 6700 Series, 7300 Series or 7400 Series. *See* Notice of Amendment No. 1, *supra* note 7, 80 FR at 22333.

[63] *See* SDR Letter, *supra* note 10, at 1.

[64] CAB Rule 328 prohibits persons associated with a CAB from participating in any manner in a private securities transaction as defined in FINRA Rule 3280(e).

[65] *See* IMS Letter 1, *supra* note 6.

[66] *See* New York State Bar Association Letter, *supra* note 6, at 3–4.

[67] *See* FINRA Response, *supra* note 11, at 23.

[68] *Id.*

[69] *See* IMS Letter 1, *supra* note 6, at 3–4.

[70] *See* FINRA Response, *supra* note 11, at 6.

[71] *See* IMS Letter 1, *supra* note 6, at 7–8.

[72] *See id. See also* Achates Letter, *supra* note 6 at 1.

[73] *See* Achates Letter, *supra* note 6, at 1.

[74] *See* Intellivest Letter, *supra* note 6, at 1.

[75] *Id.*

In addition to institutional investors, one commenter suggests that FINRA permit CAB transactions with certain other categories of persons, specifically: (1) A "knowledgeable employee" as defined in Investment Company Act Rule 3c–5, except that for purposes of the institutional investor definition, "covered company" would mean either the CAB or the issuer of the securities sold in the transaction; and (2) a person designated by the issuer of the securities sold in the transaction, provided that the CAB did not solicit the person or make a recommendation to the person with respect to purchase of the securities.[76] Another commenter also requests a de minimis and/or knowledgeable employee exemption to allow for one-off capital-raises (under various scenarios where accredited individuals working at alternative investment firms and the funds they manage or other closely affiliated individuals desire to invest) without violating the CAB rules.[77] This commenter also states that there may be circumstances where the issuer wishes to sell securities to persons who would not otherwise qualify as institutional investors, but wants the transaction to be effected by the CAB.[78] In addition, the commenter suggests that CAB rules should not prohibit sales to those categories of persons, since the usual concerns about suitability determinations and content of communications by member firms to retail investors will not apply.[79]

In response, FINRA states that the term "institutional investor" is relevant only with respect to CAB Rule 016(c)(1)(F), which permits CABs to qualify, identify, solicit or act as placement agent or finder on behalf of an issuer in connection with a sale of newly-issued, unregistered securities to institutional investors or on behalf of an issuer or control person in connection with a change of control of a privately-held company.[80] FINRA notes that CABs may provide a wide array of negotiation, consulting and advisory services to issuers, companies and their owners without regard to whether these parties fall within the definition of institutional investor pursuant to CAB Rule 016(c)(1)(A) through (E).[81] In addition, CABs are permitted to effect securities transactions on behalf of accredited investors that do not meet the definition of institutional investor in transactions involving the transfer of control of a business or company, as permitted by an SEC rule, release or no-action letter, pursuant to CAB Rule 016(c)(1)(G).[82]

By adding qualified purchasers to the definition of "institutional investor," FINRA states that its proposal permits CABs to solicit investors that have at least $5 million in investments pursuant to CAB Rule 016(c)(1)(F).[83] However, FINRA states that it does not believe it is either necessary or appropriate to extend the definition to include accredited investors who have less than $5 million in investments, since those investors may not have the requisite investment acumen or financial means to understand or assume the risks associated with investments sold by CABs.[84] FINRA believes that the CAB rule set is not an appropriate model for the broader, more retail, private placement marketplace, given that investors in the private placement market have been harmed by widespread fraud and abuse in recent years.[85] In addition, FINRA notes that the SEC is also looking at whether the definition of accredited investor should be revised.[86] Moreover, FINRA states that expanding the definition of "institutional investor" to include accredited investors would be substantially inconsistent with similar definitions of "institutional investor" or "institutional account" in other FINRA Rules.[87]

For these reasons, FINRA also does not believe it is appropriate at this time to revise the definition of institutional investor to include knowledgeable employees as that term is defined in Investment Company Act Rule 3c–5, as suggested by one commenter.[88] FINRA states that it may consider revising this definition at a later date, depending on the need to expand it, as well as CABs' investment activities.

FINRA believes that any firm that wishes to engage in private placement activities beyond that contemplated for CABs should be registered as a non-CAB broker-dealer and be subject to all FINRA rules, not just the more limited rule set applicable to CABs.[89] For example, FINRA believes that non-CAB rules that are more oriented to business conducted with retail investors, such as FINRA Rule 2210 (Communications with the Public) should apply to these types of private placement firms, rather than the CAB rules.

The Commission believes that it is reasonable and consistent with the protection of investors and the public interest for FINRA to limit the permitted activities of CABs in the manner discussed above, given the stated purpose of its proposal and the limited rule set that is applicable to CABs. Specifically, FINRA states in the Notice of Filing that it is proposing a separate rule set that would apply to firms that it describes as those that are "solely corporate financing firms that advise companies on mergers and acquisitions, advise issuers on raising debt and equity capital in private placements with institutional investors, or provide advisory services on a consulting basis to companies that need assistance analyzing their strategic and financial alternatives." [90] In this context, FINRA's CAB rules, which are more streamlined than the full FINRA rule set, are designed to provide appropriate flexibility and investor protection in the context of a CAB's limited permissible activities.

D. Conduct Rules

As detailed above in Section II.C., the CAB rule set imposes a streamlined set of conduct rules on CABS. One such rule, CAB Rule 209, states in part that a CAB must use reasonable diligence to know and retain the essential facts concerning a customer.[91] The facts essential to knowing the customer include those required to effectively service the customer's account and understand the authority of each person acting on behalf of the customer. With respect to this CAB rule, one commenter requests clarification of FINRA's statement that "[i]t also recognizes that a CAB or its associated person may look to an institutional investor's agent if the investor is represented by an agent."[92] Specifically, this commenter requests clarification as to what "look to" requires and whether this can be interpreted to mean that a CAB's responsibility under CAB Rule 209 is limited to learning the essential facts of the agent.[93] Another commenter also seeks clarification as to whether a CAB's responsibility under CAB Rule 209 is limited to learning the essential facts of the agent.[94]

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[76] *See* New York State Bar Association Letter, *supra* note 6, at 3–4.

[77] *See* Coronado Letter, *supra* note 6, at 1.

[78] *Id.*

[79] *Id.*

[80] *See* FINRA Response, *supra* note 11, at 7.

[81] *Id.* at 10.

[82] *Id.*

[83] *See id.* at 10–11 and Investment Company Act of 1940 § 2(a)(51) ("Investment Company Act").

[84] *See* FINRA Response, *supra* note 11, at 10–11.

[85] FINRA states that it has many formal investigations involving broker-dealer conduct in private placements. In 2015, FINRA conducted over 650 reviews involving private placements from sources including customer complaints, tips, referrals, and firm filings. FINRA states that approximately 100 of these matters are currently open and under review, and that it has recently settled many cases regarding private placements. FINRA states that it has brought multiple cases against firms that participated in these offerings and their relevant employees. Further, FINRA also states that state securities regulators also are bringing many enforcement cases involving private placements. FINRA notes that NASAA reported that in 2014, Regulation D offerings were the second most frequently investigated matters as reported by states. In addition, FINRA states that the SEC has settled cases involving fraud or abuse in the private placement market. FINRA states, for example, that in July 2009, the SEC brought actions involving two high-profile private placements, Medical Capital Holdings Inc. and Provident Royalties LLC. *SEC* v. *Provident Royalties, LLC.*, SEC Litigation Release No. 21118, 2009 SEC LEXIS 2241 (July 7, 2009); *SEC* v. *Medical Capital Holdings, Inc.*, SEC Litigation Release No. 21141, 2009 SEC LEXIS 2390 (July 20, 2009). *See* FINRA Response, *supra* note 11, at 11–12.

[86] *See* U.S. Securities and Exchange Commission, Report on the Review of the Definition of "Accredited Investor" (December 18, 2015), available at *www.sec.gov*.

[87] *See, e.g.*, FINRA Rules 2210(a)(4) and 4512(c).

[88] *See* FINRA Response, *supra* note 11, at 12.

[89] *Id.* at 12–13.

[90] Notice of Filing, *supra* note 3, 80 FR at 79969.

[91] *See* FINRA Response, *supra* note 11, at 16–17.

In response, FINRA states that it recognizes that firms that elect CAB status often will be dealing with customers that are represented by agents, and that CAB Rule 209 contemplates situations in which a customer is represented by an agent.[95] For example, CAB Rule 209 states in part that the facts essential to knowing the customer are those required to effectively service the customer's account and understand the authority of each person acting on behalf of a customer.[96] FINRA also states that the type of information necessary to satisfy the requirements of CAB Rule 209 will depend on the facts and circumstances. FINRA explains that the FINRA Rule 2090 "know your customer" obligation is flexible and that the extent of the obligation generally should depend on a particular firm's business model, its customers, and applicable regulations,[97] and that this same flexibility applies to CAB Rule 209, which is modeled on FINRA Rule 2090. Furthermore, FINRA notes that although a CAB must understand, *inter alia,* the essential facts about a customer that are necessary to effectively service the customer's account and the authority of each person acting on behalf of the customer, the rule does not prescribe the exact information that should be assessed or the process by which it should be obtained. Depending on the facts and circumstances, FINRA states that a CAB could comply with CAB Rule 209 by reasonably relying on the assistance of a customer's agent in obtaining the essential facts about the customer.[98]

CAB Rule 211 states that a CAB or an associated person of a CAB must have a reasonable basis to believe that a recommended transaction or investment strategy (as defined in FINRA Rule 2111) involving a security or securities is suitable for the customer, based on the information obtained through the reasonable diligence of the broker or associated person to ascertain the customer's investment profile. CAB Rule 211 specifies that a CAB or associated person fulfills this customer-specific suitability obligation for an institutional investor, if: (1) The broker or associated person has a reasonable basis to believe that the institutional investor is capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies involving a security or securities; and (2) the institutional investor affirmatively indicates that it is exercising independent judgment in evaluating the broker's or associated person's recommendations. CAB Rule 211 also states in part that, where an institutional investor has delegated decision-making authority to an agent, such as an investment adviser or a bank trust department, the factors in determining whether a CAB has a reasonable basis to believe that the institutional investor is capable of evaluating investment risks independently and indicates that it is exercising independent judgment apply to the agent rather than to the investor.

One commenter generally agrees with CAB Rule 211, but believes that the rule fails by requiring the suitability analyses to be performed before any recommendation is made.[99] The commenter believes that the rule does not recognize that the process of diligence is ongoing, in many cases can take several months to several years before an investment decision is made, and often does not, and should not conclude until the deal is closed. The commenter believes that Rule 211 should emphasize this point and encourage registered representatives to periodically review their suitability analysis throughout the offering process, but no less frequently than once before the subscription agreement or relevant contract is signed and due diligence is as complete as it can be at that particular time.[100] In response, FINRA states that FINRA Rule 2111 applies the suitability rule on a recommendation-by-recommendation basis. FINRA explains that it is important to emphasize that the rule's focus is on whether the recommendation was suitable when it was made.[101] A recommendation to hold securities, maintain an investment strategy involving securities or use another investment strategy involving securities—as with a recommendation to purchase, sell or exchange securities—normally would not create an ongoing duty to monitor and make subsequent recommendations. Likewise, CAB Rule 211 would not create an ongoing duty to monitor and make subsequent recommendations.[102]

Two commenters request that FINRA clarify what it meant when it said that a CAB may look to an institutional investor's agent for suitability.[103] One of those commenters suggests that FINRA should recognize that a CAB may not have access to some information about an investor, particularly where the investor is represented by an agent. As an example, the commenter posits that a CAB may have little information about an investor's overall investment portfolio. The commenter requests that FINRA clarify how CAB Rule 211 would apply in these circumstances. In particular, the commenter recommends that the proposed rules address some type of minimum compliance standards that would be appropriate to these situations, and that a demonstrable best efforts basis may be a satisfactory alternative in such instances.[104]

As noted, FINRA recognizes that CABs often will be dealing with customers represented by agents, and CAB Rule 211 contemplates such situations. FINRA emphasizes that CAB Rule 211 states in part that, where an institutional investor has delegated decision-making authority to an agent, such as an investment adviser or a bank trust department, the factors in determining whether a CAB has a reasonable basis to believe that the institutional investor is capable of evaluating investment risks independently and indicates that it is exercising independent judgment apply to the agent rather than to the investor.[105] Thus, FINRA does not believe it would be appropriate to suggest minimum compliance standards in situations in which a CAB may have limited information about a customer.[106] FINRA states that determining the "essential facts" needed to effectively service a customer's account and the information necessary to form a reasonable basis to believe that a recommendation is suitable for a non-institutional customer or that an institutional customer (or its agent) is capable of evaluating investment risks independently will always vary depending on the facts and circumstances.

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[92] *See* 3PM Letter, *supra* note 6, at 2–3.

[93] *Id.*

[94] *See* Roth Letter, *supra* note 6, at 1–2.

[95] *See* FINRA Response, *supra* note 11, at 17.

[96] *Id.* at 17–18.

[97] *See* Exchange Act Release No. 62718 (Aug. 13, 2010), 75 FR 52562 (Aug. 26, 2010) (Notice of Filing of File No. SR–FINRA–2010–039).

[98] *See* FINRA Response, *supra* note 11, at 18.

[99] *See* 3PM Letter, *supra* note 6, at 3.

[100] *Id.*

[101] *See* FINRA Response, *supra* note 11, at 18.

[102] *Id.*

[103] *See* Roth Letter, *supra* note 6, at 1 and 3PM Letter, *supra* note 6, at 3.

[104] *See* 3PM Letter, *supra* note 6, at 3.

[105] *See* FINRA Response, *supra* note 11, at 18.

FINRA's CAB rules do not apply FINRA Rules 2121 (Fair Prices and Commissions), 2122 (Charges for Services Performed), and 2124 (Net Transactions with Customers) to CABs. FINRA does state, however, that depending on the facts, CAB Rule 201 (Standards of Commercial Honor and Principles of Trade) may apply in situations in which a CAB charged a commission or fee that clearly is unreasonable under the circumstances. One commenter states its view that applying CAB Rule 201, which is modeled on FINRA Rule 2010, may lead to interpretive issues when a CAB charges a commission or fee that clearly is unreasonable under the circumstances.[107] In response, FINRA states that it does not agree that the CAB rule set will create an interpretive issue in situations where a CAB charges unreasonable commissions.[108] Specifically, FINRA explains that it will apply the principles of CAB Rule 201 in the same manner as it currently interprets FINRA Rule 2010. Should interpretive issues arise with regard to the application of CAB Rule 201 to CAB commissions or fees, FINRA is open to further discussion of any specific interpretive issues should the context arise, and would consider whether any further rulemaking in this area is necessary.[109]

The Commission believes that the CAB conduct rules are consistent with Section 15A(b)(6) of the Exchange Act in that they are reasonably designed to take into account the limited permissible activities of CABs, while still addressing the protection of investors and the public interest. The Commission also believes that FINRA has appropriately responded to comments regarding the proposed CAB conduct rules to clarify their scope and purpose. In this regard, we note that FINRA indicates that, depending on the facts, CAB Rule 201 (Standards of Commercial Honor and Principles of Trade) may apply in situations in which a CAB charges a commission or fee that clearly is unreasonable under the circumstances. We also note that FINRA clarifies that a CAB could comply with CAB Rule 209 (Know Your Customer) by reasonably relying on the assistance of a customer's agent in obtaining the essential facts about the customer, and that CAB Rule 211 (Suitability) contemplates situations where a CAB will be dealing with customers represented by agents for which such suitability determinations will vary depending on the facts and circumstances.

E. Supervisory Procedures and Cybersecurity

As detailed above in Section II.D., the CAB Rule 300 Series establishes a limited set of supervisory rules for CABs. FINRA states that the CAB supervisory rules are designed to streamline the requirements applicable to CABs where doing so does not hinder investor protection, and that doing so will provide flexibility to CABs to tailor their supervisory structure to their business model, which is limited in scope of permissible activities.[110]

One commenter states its view that requirements related to supervisory procedures for supervisors should not be required for CABs.[111] This commenter also recommends that FINRA clarify its expectations with respect to email review.[112] Specifically, the commenter suggests that the rules should note that expectations for email review should be tailored according to the CAB's business and that such expectations will not be as stringent as those for broker-dealers engaged in non-CAB activities.[113] In response, FINRA states that CAB Rule 311 incorporates by reference FINRA Rule 3110(b)(4), which requires members to adopt procedures for the review of incoming and outgoing written (including electronic) correspondence and internal communications relating to a member's investment banking business.[114] FINRA states that the supervisory procedures must be appropriate for the member's business, size, structure and customers.[115] FINRA believes that these standards offer the flexibility that the commenter seeks, since they recognize that the procedures may be tailored based on a firm's business, size, structure and customers.[116]

Also as discussed above in Section II.E, FINRA has not applied FINRA Rule 4370, which requires FINRA members to maintain a business continuity plan, to CABs. One commenter recommends that FINRA clarify the expectations of CABs with respect to cybersecurity.[117] Specifically, while the proposal suggests that a CAB would not be required to have a business continuity plan, the commenter suggests that the final rules include a requirement to have appropriate cybersecurity/information security programs in place, tailored to the CAB's business.[118] In response, FINRA states that it is not applying the business continuity plan requirements of FINRA Rule 4370, given that, among other things, a CAB may not hold, manage, possess, or otherwise handle customer funds or securities. FINRA, however, recognizes that CABs are broker-dealers, and FINRA states that it will monitor, as part of FINRA's examination and surveillance process, the development and operation of CABs' business to identify emergency or business disruptions at CABs that affect the ability of the members to meet their existing obligations to investors and issuers. FINRA will use these efforts to assist in assessing whether additional rulemaking in this area is required.[119] Likewise, FINRA will examine a CAB's operations to determine compliance with all applicable SEC rules.[120]

The Commission believes that CAB rules are reasonably designed to provide flexibility to CABs to structure their business, including their supervisory and cybersecurity policies and procedures, while providing for protection of investors and the public interest, in the context of the limited permitted activities of CABs. Although FINRA is providing flexibility to CABs, we note that FINRA states that a CAB's supervisory procedures must be appropriate for the member's business, size, structure and customers, and that FINRA will monitor, as part of its examination and surveillance process, the development and operation of CABs' business to identify emergency or business disruptions at CABs that affect the ability of the members to meet their existing obligations to investors and issuers. Accordingly, the Commission believes that the proposed rule change is reasonably designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest consistent with Section 15A(b)(6) of the Exchange Act.

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[106] *Id.*

[107] *See* IMS Letter 1, *supra* note 6, at 12 and IMS Letter 2, *supra* note 6, at 4–6.

[108] *See* FINRA Response, *supra* note 11, at 16.

[109] *Id.*

[110] *Id.* at 20.

[111] *See* Foreside Letter, *supra* note 6, at 1.

[112] *Id.*

[113] *Id.*

[114] *See* FINRA Response, *supra* note 11, at 20.

[115] *Id.*

[116] One commenter requests that the SEC work with the appropriate authorities to revisit the anti-money laundering responsibilities of CABs and consider requiring other U.S. registered entities (such as registered investment advisers) to share certain data with FINRA member firms so that all registered participants may satisfy their respective compliance obligations in the most complete and accurate manner possible. In addition, this commenter seeks clarification as to whether CABs, as registered broker-dealers, may rely on previous SEC staff anti-money laundering guidance. *See* 3PM Letter, *supra* note 6.

In response, FINRA states that because the Bank Secrecy Act imposes AML obligations on all broker-dealers, FINRA does not believe it has the authority to exempt CABs from the requirements to adopt and implement an AML program. To the extent commenters are making suggestions directly to the SEC staff, FINRA states that it is willing to work with the Commission staff if asked. The Commission also notes that CABs, as registered broker-dealers, may rely on previous SEC staff guidance, if applicable to their anti-money laundering requirements and activities.

[117] *See* Foreside Letter, *supra* note 6, at 1.

[118] *Id.*

[119] *See* FINRA Response, *supra* note 11, at 20–21.

[120] *Id.*

IV. Conclusion

For the reasons discussed above, the Commission finds that the rule change, as modified by Amendment Nos. 1 and 2, is consistent with the Exchange Act and the rules and regulations thereunder, in particular with Section 15A(b)(6) of the Exchange Act, which requires in part that FINRA's rules be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest.[121]

It Is Therefore Ordered, pursuant to Section 19(b)(2) of the Act,[122] that the rule change, SR–FINRA–2015–054, as modified by Amendment Nos. 1 and 2, be, and hereby is, approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[123]

Robert Errett,

Deputy Secretary.

[FR Doc. 2016–20211 Filed 8–23–16; 8:45 am]

BILLING CODE 8011–01–P

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[121] *See* 15 U.S.C. 78o–3(b)(6).

[122] 15 U.S.C. 78s(b)(2).

[123] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–78610; File No. SR–NYSEArca–2016–82]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Designation of a Longer Period for Commission Action on a Proposed Rule Change To List and Trade Shares of the JPMorgan Diversified Event Driven ETF Under NYSE Arca Equities Rule 8.600

August 18, 2016.

On June 20, 2016, NYSE Arca, Inc. filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")[1] and Rule 19b–4 thereunder,[2] a proposed rule change to list and trade shares of the JPMorgan Diversified Event Driven ETF under NYSE Arca Equities Rule 8.600. The proposed rule change was published for comment in the **Federal Register** on July 7, 2016.[3] The Commission received no comment letters on the proposed rule change.

Section 19(b)(2) of the Act[4] provides that, within 45 days of the publication of notice of the filing of a proposed rule change, or within such longer period up to 90 days as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or as to which the self-regulatory organization consents, the Commission shall either approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether the proposed rule change should be disapproved. The 45th day after publication of the notice for this proposed rule change is August 21, 2016. The Commission is extending this 45-day time period.

The Commission finds that it is appropriate to designate a longer period within which to take action on the proposed rule change so that it has sufficient time to consider the proposed rule change. Accordingly, the Commission, pursuant to Section 19(b)(2) of the Act,[5] designates October 5, 2016, as the date by which the Commission should either approve or disapprove or institute proceedings to determine whether to disapprove the proposed rule change (File Number SR–NYSEArca–2016–82).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[6]

Robert W. Errett,

Deputy Secretary.

[FR Doc. 2016–20204 Filed 8–23–16; 8:45 am]

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[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] *See* Securities Exchange Act Release No. 78218 (Jul. 1, 2016), 81 FR 44339.

[4] 15 U.S.C. 78s(b)(2).

[5] *Id.*

[6] 17 CFR 200.30–3(a)(31).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–78611; File No. SR–MSRB–2016–07]

Self-Regulatory Organizations; Municipal Securities Rulemaking Board; Notice of Filing of Amendment No. 1 and Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 1, Consisting of Proposed Amendments to Rule G–12, on Uniform Practice, Regarding Close-Out Procedures for Municipal Securities

August 18, 2016.

I. Introduction

On May 11, 2016, the Municipal Securities Rulemaking Board (the "MSRB" or "Board") filed with the Securities and Exchange Commission (the "SEC" or "Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")[1] and Rule 19b-4 thereunder,[2] a proposed rule change consisting of proposed amendments to Rule G–12, on uniform practice, regarding close-out procedures for municipal securities. The proposed rule change was published for comment in the **Federal Register** on June 1, 2016.[3]

The Commission received three comment letters on the proposal.[4] On July 25, 2016, the MSRB responded to the comments[5] and filed Amendment No. 1 to the proposed rule change.[6] The

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[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b-4.

[3] Securities Exchange Act Release No. 77903 (May 25, 2016) (the "Proposing Release"), 81 FR 35111 (June 1, 2016).

[4] *See* Letters to Secretary, Commission, from Leslie M. Norwood, Managing Director and Associate General Counsel, Securities Industry and Financial Markets Association ("SIFMA"), dated June 22, 2016 (the "SIFMA Letter"); Michael Nicholas, Chief Executive Officer, Bond Dealers of America ("BDA"), dated June 22, 2016 (the "BDA Letter"); and David T. Bellaire, Esq., Executive Vice president and General Counsel, Financial Services Institute ("FSI"), dated June 22, 2016 (the "FSI Letter").

[5] *See* Letter to Secretary, Commission, from Michael Cowart, Deputy Director, Professional Qualifications and Assistant General Counsel, MSRB, dated July 25, 2016 (the "MSRB Response and Amendment Letter"), available at *https://www.sec.gov/comments/sr-msrb-2016-07/msrb201607-4.pdf*.

[6] *Id.* In Amendment No. 1, the MSRB partially amended the text of the original proposed rule

Commission is publishing this notice to solicit comments on Amendment No. 1 to the proposed rule change from interested persons and is approving the proposed rule change, as modified by Amendment No. 1, on an accelerated basis.

II. Description of the Proposed Rule Change

In the Proposing Release, the MSRB stated that a more timely resolution of inter-dealer fails would ultimately benefit customers by providing greater certainty that their fully paid for securities are in fact owned in their account, not allocated to a firm short, and would benefit dealers by reducing the risk and costs associated with inter-dealer fails.

As further described in the Proposing Release and the MSRB Response and Amendment Letter, the MSRB states that the purpose of the proposed rule change is to significantly compress the timing to initiate and complete a close-out by allowing a close-out notice to be issued the day after the purchaser's original settlement date, with the last day by which the purchasing dealer must complete a close-out on an open transaction being reduced to 10 calendar days, with an option for the buyer to grant the seller a one-time 10 calendar day extension.[7]

With the vast majority of municipal securities in book entry form and the Depository Trust & Clearing Corporation's ("DTCC") continued efforts to promote dematerialization, the MSRB proposed that firms should no longer have to provide a 10-day delivery window before implementing an execution period. The MSRB believes a three-day delivery window would be sufficient as the majority of inter-dealer fails are resolved within days of the original settlement and/or a fail situation is known prior to the original settlement date.

Additionally, the current rule requires that the earliest day that can be specified as the execution date is 11 days after telephonic notice. The proposed amendments would amend the current allowable execution time frame from 11 days to four days after electronic notification. Accelerating the execution date could improve a firm's likelihood of finding a security for a buy-in, lower overall counter-party risk and may further reduce accrual, capital and other expenses.

Under the proposed rule change, a purchasing dealer notifying the selling dealer of an intent to close out an inter-dealer fail would continue to prompt DTCC to "exit" the position from DTCC's continuous net settlement ("CNS") and the two parties are responsible for effecting the close-out. Because a municipal security may not be available for purchase, incorporating the buy-in procedures of a registered clearing agency will often not solve the inter-dealer fail. The MSRB expects firms to not solely rely upon the CNS system or the services of a registered clearing agency to resolve inter-dealer fails and take prompt action to close out inter-dealer fails in a timely manner. Under the proposed rule change, regardless of the date the positions are exited from CNS, the inter-dealer fail must be resolved within 20 calendar days of the purchasing dealer's original settlement date. The MSRB is also proposing to retire the Manual on Close-Out Procedures.[8]

Proposed Amendments to MSRB Rule G–12(h)

Rule G–12, on uniform practice, establishes uniform industry practices for processing, clearance and settlement of transactions in municipal securities between a broker, dealer or municipal securities dealer and any other broker, dealer or municipal securities dealer. The proposed amendments would amend Rule G–12(h) by requiring close-outs to be settled no later than 20 calendar days after the settlement date. The proposed amendments to G–12(h)(i)(B) would allow for the close-out process to continue to provide three options to the purchasing dealer. The three options include: (1) Purchase ("buy-in") at the current market all or any part of the securities necessary to complete the transaction for the account and liability of the seller; (2) accept from the seller in satisfaction of the seller's obligation under the original contract (which shall be concurrently cancelled) the delivery of municipal securities that are comparable to those originally bought in quantity, quality, yield or price, and maturity, with any additional expenses or any additional cost of acquiring such substituted securities being borne by the seller; or (3) require the seller to repurchase the securities on terms which provide that the seller pay an amount which includes accrued interest and bear the burden of any change in market price or yield.

Firms must coordinate internally to determine which of the three close-out options are appropriate for any given fail-to-deliver situation. While a buy-in may be the most preferred method, Rule G–12(h) provides two other options to a purchaser in the event a buy-in is not feasible. Firms are reminded that, regardless of the option agreed upon by the counterparties, including a cancelation of the original transaction, the close-out transaction is reportable to the Real-time Transaction Reporting System ("RTRS") as currently required pursuant to Rule G–14.

Additionally, the proposed amendments to Rule G–12(h)(i)(A) would allow a purchaser to notify the seller of the purchaser's intent to close-out the transaction the first business day following the purchaser's original transaction settlement date, instead of waiting five business days as currently required in Rule G–12(h)(i)(A).

Currently Rule G–12(h) references use of the telephone and mail as part of the notification process. The proposed amendments would update Rule G–12(h) throughout, to reflect modern communication methods and widely-used industry practices that would facilitate more timely and efficient close-outs. For example, DTCC's SMART/Track is available for use by any existing NSCC clearing firm or DTCC settling member, allowing users to create, retransmit, respond, update, cancel and view a notice.

The proposed amendments to Rule G–12(h)(i)(D) would require sellers to use their best efforts to locate the securities that are subject to a close-out notice from a purchaser. The proposed amendments to Rule G–12(h)(i)(E)(1) would also require the seller to bear any burden in the market price, with any benefit from any change in the market price remaining with the purchaser.

The proposed amendments would also require a purchasing dealer that has multiple counterparties, to utilize the FIFO (first-in-first-out) method for determining the contract date for the failing quantity. Amendments to Rule G–12(h)(iv) would require dealers to maintain all records regarding the close-out transaction as part of the firm's books and records.

III. Summary of Comments Received and the MSRB's Response

As noted previously, the Commission received three comment letters on the proposed rule change and a response

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change to shorten the period in which firms are required to resolve an inter-dealer fail from 20 calendar days to 10 calendar days, and to permit the buyer to grant the seller a one-time 10 calendar day extension.

[7] *See supra* notes 3 and 5. The rule as initially proposed in the Proposing Release provided for a period of 20 days in which a close-out must be completed.

[8] *See* Manual on Close-Out Procedures. The Manual on Close-Out Procedures will be retired because such procedures would be outdated and, given the proposed rule change's overall simplicity, developing an updated version of the manual is not warranted.

letter from the MSRB.[9] The commenters generally support the proposed rule change.[10] However, some commenters asked for further clarification and provided suggested amendments to the proposed rule change.[11] The MSRB has responded to the commenters, as discussed below.[12]

1. Shorter Close-Out Deadline

As noted above, the original proposed rule change provided for a close-out deadline of 20 calendar days. Both BDA and SIFMA commented that they would support an even shorter close-out period, with both suggesting a period of 10 calendar days, with an option for the buyer to consent to a 10-day extension, for a maximum aggregate total of 20 days.[13]

In response to comments, the MSRB proposed, in Amendment No. 1, to amend the original proposed rule change to require firms to resolve an inter-dealer fail from 20 calendar days to 10 calendar days and permit the buyer to grant the seller a one-time 10 calendar day extension, which would allow the buyer flexibility, while still ensuring that inter-dealer fails would be closed-out in a maximum of 20 calendar days. The MSRB stated in the Proposing Release that "a more timely resolution of inter-dealer fails would ultimately benefit customers by providing greater certainty that their fully paid for securities are in fact owned in their account and not allocated to a firm short, and would also benefit dealers by reducing the risk and costs associated with inter-dealer fails." [14] The MSRB states in the MSRB Response and Amendment Letter that shortening the close-out period from 20 calendar days, as stated in the original proposed rule change, to 10 calendar days will further reduce the risk and cost associated with inter-dealer fails.

2. Requests for Clarification and Guidance

BDA commented that its member firms still have outstanding questions about how the proposed rule change would impact close-out processes related to accounts transferred to a broker-dealer via the Automated Customer Account Transfer Service ("ACATS"), and requested additional guidance from the MSRB regarding close-outs through ACATS.[15] SIFMA requested further guidance from the MSRB regarding close-outs with respect to self-directed customer accounts, in which broker-dealers are not allowed to use discretion.[16]

The MSRB responded that both of these requests for guidance are beyond the scope of the proposed rule change, both as originally proposed and as amended by Amendment No. 1.[17]

IV. Discussion and Commission Findings

The Commission has carefully considered the proposed rule change, as modified by Amendment No. 1, as well as the three comment letters received and the MSRB's response. The Commission finds that the proposed rule change, as amended by Amendment No. 1, is consistent with the requirements of the Act and the rules and regulations thereunder applicable to the MSRB.

In particular, the proposed rule change is consistent with Section 15B(b)(2)(C) of the Act. Section 15B(b)(2)(C) of the Act requires that the MSRB's rules be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in municipal securities and municipal financial products, to remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products, in general, to protect investors, municipal entities, obligated persons, and the public interest.[18]

The MSRB states that the proposed rule change would benefit investors, dealers and issuers. Specifically, the MSRB states that dealers may benefit from clarifications and revisions that more closely reflect actual market practices. In addition, dealers may be able to more quickly and efficiently resolve inter-dealer fails, which may reduce dealer risk, reduce the likelihood and duration that dealers are required to pay "substitute interest" to customers and reduce systemic risk. The MSRB further states that the proposed rule change may also reduce the likelihood and duration of firm short positions that allocate to customer long positions, reduce investor tax exposure and increase investor confidence in the market. According to the MSRB, issuers and the market as a whole may benefit from increased investor confidence.

In approving the proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation.[19] The Commission believes the proposed rule change will improve efficiency in the municipal securities market. The Commission notes that all of the commenters stated that the proposed rule change would have positive effects on municipal market efficiency.[20] The Commission does not believe that the proposed rule change would impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act.

As noted above, the Commission received three comment letters on the filing. The Commission believes that the MSRB, through its responses and through proposed changes in Amendment No. 1, has addressed commenters' concerns.

For the reasons noted above, including those discussed in the MSRB Response and Amendment Letter, the Commission believes that the proposed rule change, as amended by Amendment No. 1, is consistent with the Act.

V. Solicitation of Comments on Amendment No. 1

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether Amendment No. 1 to the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–MSRB–2016–07 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549.

All submissions should refer to File Number SR–MSRB–2016–07. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the MSRB. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–MSRB–2016–07 and should be submitted on or before September 14, 2016.

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[9] *See supra* notes 4 and 5.

[10] *Id.*

[11] *Id.*

[12] *See* MSRB Response and Amendment Letter.

[13] *See* BDA Letter and SIFMA Letter.

[14] *See supra* note 3.

[15] *See* BDA Letter.

[16] *See* SIFMA Letter.

[17] *See* MSRB Response and Amendment Letter.

[18] *See* 15 U.S.C. 78o-4(b)(2)(C).

[19] 15 U.S.C. 78c(f).

[20] *See supra* note 4.

VI. Accelerated Approval of Proposed Rule Change as Modified by Amendment No. 1

The Commission finds good cause for approving the proposed rule change, as amended by Amendment No. 1, prior to the 30th day after the date of publication of notice in the **Federal Register.** As discussed above, Amendment No. 1 amends the proposed rule change by shortening the required time frame for firms to resolve an inter-dealer fail from 20 calendar days to 10 calendar days, and permitting the buyer to grant the seller a one-time 10 calendar day extension.

The MSRB has proposed the revisions included in Amendment No. 1 to further reduce the risk and cost associated with inter-dealer fails. As noted by the MSRB, the only substantive change to the proposed amendment, the shortening of the close-out period, was made to address concerns raised during the comment period. The MSRB has further noted that, in light of the stated goal of the original proposal to compress the timing for initiating and completing a close-out, the revisions are consistent with the original proposal and are unlikely to be controversial.

For the foregoing reasons, the Commission finds good cause for approving the proposed rule change, as modified by Amendment No. 1, on an accelerated basis, pursuant to Section 19(b)(2) of the Act.

VII. Conclusion

It Is Therefore Ordered, pursuant to Section 19(b)(2) of the Act,[21] that the proposed rule change (SR–MSRB–2016–07), as modified by Amendment No. 1, be, and hereby is, approved on an accelerated basis.

For the Commission, pursuant to delegated authority.[22]

Robert W. Errett,

Deputy Secretary.

[FR Doc. 2016–20205 Filed 8–23–16; 8:45 am]

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[21] 15 U.S.C. 78s(b)(2).

[22] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

Proposed Collection; Comment Request

Upon Written Request, Copies Available From: Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE., Washington, DC 20549–2736.

Extension:
Rule 17a–3, SEC File No. 270–026, OMB Control No. 3235–0033.

Notice is hereby given that pursuant to the Paperwork Reduction Act of 1995 (''PRA'') (44 U.S.C. 3501 *et seq.*) the Securities and Exchange Commission (''Commission'') is soliciting comments on the existing collection of information provided for in Rule 17a–3 (17 CFR 240.17a–3), under the Securities Exchange Act of 1934 (15 U.S.C. 78a *et seq.*). The Commission plans to submit this existing collection of information to the Office of Management and Budget (''OMB'') for extension and approval.

Rule 17a–3 under the Securities Exchange Act of 1934 establishes minimum standards with respect to business records that broker-dealers registered with the Commission must make and keep current. These records are maintained by the broker-dealer (in accordance with a separate rule), so they can be used by the broker-dealer and reviewed by Commission examiners, as well as other regulatory authority examiners, during inspections of the broker-dealer.

The collections of information included in Rule 17a–3 are necessary to provide Commission, self-regulatory organization (''SRO'') and state examiners to conduct effective and efficient examinations to determine whether broker-dealers are complying with relevant laws, rules, and regulations. If broker-dealers were not required to create these baseline, standardized records, Commission, SRO and state examiners could be unable to determine whether broker-dealers are in compliance with the Commission's antifraud and anti-manipulation rules, financial responsibility program, and other Commission, SRO, and State laws, rules, and regulations.

As of April 1, 2016 there were 4,104 broker-dealers registered with the Commission. The Commission estimates that these broker-dealer respondents incur a total burden of 2,763,566 hours per year to comply with Rule 17a–3.

In addition, Rule 17a–3 contains ongoing operation and maintenance costs for broker-dealers, including the cost of postage to provide customers with account information, and costs for equipment and systems development. The Commission estimates that under Rule 17a–3(a)(17), approximately 41,143,233 customers will need to be provided with information regarding their account on a yearly basis. The Commission estimates that the postage costs associated with providing those customers with copies of their account record information would be approximately $13,577,267 per year (41,143,233 × $0.33).[1] The staff estimates that broker-dealers establishing liquidity, credit, and market risk management controls pursuant to Rule 17a–3(a)(23) incur one-time startup costs of $924,000, or $308,000 amortized over a three-year approval period, to hire outside counsel to review the controls. The staff further estimates that the ongoing equipment and systems development costs relating to Rule 17a–3 for the industry would be about $30,677,094 per year. Consequently, the total cost burden associated with Rule 17a–3 would be approximately $44,562,361 per year.

Written comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's estimate of the burden of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology. Consideration will be given to comments and suggestions submitted in writing within 60 days of this publication.

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[1] Estimates of postage costs are derived from past conversations with industry representatives and have been adjusted to account for inflation and increases in postage costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information under the PRA unless it displays a currently valid OMB control number.

Please direct your written comments to: Pamela Dyson, Director/Chief Information Officer, Securities and Exchange Commission, c/o Remi Pavlik-Simon, 100 F Street NE., Washington, DC 20549, or send an email to: *PRA_Mailbox@sec.gov.*

Dated: August 19, 2016.

Brent J. Fields,

Secretary.

[FR Doc. 2016–20256 Filed 8–23–16; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–78609; File No. SR–FINRA–2016–031]

Self-Regulatory Organizations; Financial Industry Regulatory Authority, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Relating to Use of the Alternative Display Facility for Trade Reporting Purpose Only

August 18, 2016.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on August 11, 2016, Financial Industry Regulatory Authority, Inc. (“FINRA”) filed with the Securities and Exchange Commission (“SEC” or “Commission”) the proposed rule change as described in Items I, II, and III below, which Items have been prepared by FINRA. FINRA has designated the proposed rule change as constituting a “non-controversial” rule change under paragraph (f)(6) of Rule 19b–4 under the Act,[3] which renders the proposal effective upon receipt of this filing by the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

FINRA is proposing a proposed rule change relating to use of the Alternative Display Facility (“ADF”) by FINRA members for trade reporting purposes only.

The text of the proposed rule change is available on FINRA’s Web site at *http://www.finra.org,* at the principal office of FINRA and at the Commission’s Public Reference Room.

II. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, FINRA included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

Background

On January 20, 2016, FINRA published a *Trade Reporting Notice* with guidance on firms’ over-the-counter (“OTC”) equity trade reporting obligations in the event of a systems issue during the trading day that prevents them from reporting OTC trades in NMS stocks in accordance with FINRA rules.[4] As set forth in the *Notice,* a firm that routinely reports its OTC trades in NMS stocks to only one FINRA trade reporting facility (a firm’s “primary facility”) must establish and maintain connectivity and report to a second FINRA trade reporting facility (a firm’s “secondary facility”), if the firm intends to continue to support OTC trading as an executing broker while its primary facility is experiencing a widespread systems issue.[5] FINRA currently has three facilities that support member reporting of OTC trades in NMS stocks, as defined in SEC Rule 600(b) of Regulation NMS: the ADF and two Trade Reporting Facilities (“TRFs”). The TRFs are facilities that are operated by both FINRA and its exchange partners (NASDAQ and NYSE).

Since publication of the *Trade Reporting Notice,* a number of firms have inquired about using the ADF as their secondary facility for trade reporting, and at least one has inquired about using the ADF as its primary facility. While the ADF historically has not been used by members for trade reporting without quoting activity, there is nothing in the ADF rules[6] to prohibit it. Thus, to better accommodate firms in their efforts to comply with the guidance in the *Trade Reporting Notice,* and to provide an alternative to connecting to both TRFs, FINRA will make the ADF available to members for trade reporting purposes only.[7] FINRA currently is making systems updates to the ADF and anticipates that the ADF will be available to members before the end of this year.[8] Members that use the ADF for trade reporting purposes only would not be able to quote on the ADF without registering under one of the two categories of “ADF Market Participant” under current ADF rules (*i.e.,* Registered Reporting ADF ECN and Registered Reporting ADF Market Maker) and satisfying all applicable requirements for quoting.[9]

Because the substantive trade reporting and trade reporting participation requirements under current ADF rules are consistent with the trade reporting and participation requirements applicable to the TRFs,[10] significant rulemaking is not needed to enable firms to use the ADF for trade reporting purposes only. However, FINRA is proposing the following additional requirements that would apply specifically to members that use the ADF for trade reporting purposes only.

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[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] 17 CFR 240.19b–4(f)(6).

[4] *See Trade Reporting Notice,* January 20, 2016 (OTC Equity Trading and Reporting in the Event of Systems Issues).

[5] As discussed in the *Notice,* if a firm chooses not to have connectivity to a secondary facility, it should cease executing OTC trades altogether when its primary trade reporting facility is experiencing a widespread systems issue. In that instance, the firm could route orders for execution to an exchange or another FINRA member (*i.e.,* a member with connectivity and the ability to report to a FINRA trade reporting facility that is operational).

[6] *See* Rule 6200 and 7100 Series.

[7] While members will have the option of using the ADF as their primary facility for trade reporting, FINRA anticipates that members would be more likely to use the ADF as their secondary facility. FINRA has historically operated the ADF as a utility and has not attempted to actively attract participants in the OTC trade reporting space. For example, FINRA does not offer a market data revenue share program for the ADF comparable to the TRFs. *See* Rules 7610A and 7610B.

[8] FINRA notes that in addition to the systems updates that will be completed this year, the ADF may need additional infrastructure enhancements to support significant trade reporting volume. However, the necessary enhancements, and the time it may take to make those enhancements, will not be known until FINRA has a more concrete understanding of the level of firms’ interest in using the ADF for trade reporting purposes only and their potential volume.

[9] For example, in addition to registration, FINRA rules include certification and deposit requirements for ADF quoting participants, as well as capacity fees and penalties. *See, e.g.,* Rules 6271 and 7580.

[10] *See, e.g.,* Rules 6282 and 7120; 6380A and 7220A; and 6380B and 7220B.

Proposed Testing Requirements

FINRA is proposing to adopt new paragraph (b)(2)(E) of Rule 7120 (Trade Reporting Participation Requirements) to require members that intend to use the ADF for trade reporting purposes only and connect to the ADF via a Financial Information eXchange ("FIX") line to participate in annual connectivity and capacity/stress testing. Members that use only the web browser for trade reporting to the ADF and do not have any FIX connections would not be required to participate in connectivity and capacity/stress testing.[11]

FINRA is proposing to waive the testing requirements under Rule 7120(b)(2)(E) for members that meet certain thresholds. Specifically, members that report at least 100 trades per month to the ADF would not be required to participate in annual connectivity testing. Thus, a member that elects to use the ADF as its primary trade reporting facility likely would be excluded from this requirement. In addition, FINRA is proposing that members would not be required to participate in annual capacity/stress testing unless their actual ADF activity levels or their capacity projections based on their TRF usage[12] increase by more than 20% from one year to the next. FINRA notes that the proposed waivers would apply independently. For example, a member may be subject to annual connectivity testing (because it reports fewer than 100 trades per month to the ADF), while being excused from the capacity/stress testing requirement (because its capacity projection based on its TRF usage has not increased by more than 20% from the prior year).

Pursuant to proposed Rule 7120(b)(2)(E), members that are required to participate in annual connectivity and capacity/stress testing will not be charged fees under current Rule 7530(c) for the annual testing. However, members that request additional testing beyond the required annual connectivity and capacity/stress testing would be required to pay fees for testing services under Rule 7530(c).[13]

FINRA believes that the proposed testing requirements will help ensure that the ADF has sufficient capability and capacity to support trade reporting, particularly in the event that members relying on the ADF as their secondary facility for trade reporting must report to the ADF in response to a widespread systems issue in their primary facility.

Proposed FIX Connectivity Fee

FINRA is proposing to charge members that use the ADF for trade reporting purposes only and connect to the ADF via a FIX line a monthly fee of $500. The proposed fee would apply to all members that use the ADF for trade reporting purposes only (as either their primary or secondary facility for trade reporting).[14]

The proposed fee would replace the fees for ADF terminal software and servers under current Rule 7520 (Equipment Related Charges).[15] These fees are obsolete, as members no longer use workstations to connect to the ADF, but instead, connect via FIX or web browser. Members that elect to trade report to the ADF via web browser would pay the monthly fee of $20 per user ID under current Rule 7510(c), rather than the proposed monthly fee for FIX connectivity.[16]

The proposed FIX connectivity fee would help cover the costs associated with maintaining the ADF platform and ensuring that there is sufficient capacity on the platform and at the securities information processors to accommodate trade reporting, particularly in the event that firms relying on the ADF as their secondary facility for trade reporting must report to the ADF in response to a widespread systems issue in their primary facility.

Technical Conforming Changes

FINRA is proposing the following technical conforming changes to the ADF rules.

First, FINRA is proposing to amend and rename Rule 6170 (Primary and Additional MPIDs for Alternative Display Facility Participants). With the exception of paragraphs (d) and (e), Rule 6170 relating to the use of multiple market participant identifiers ("MPIDs") currently is limited to ADF quoting participants. FINRA is proposing to amend the Rule, as applicable, to also apply to members that use the ADF for trade reporting purposes only. In addition, FINRA is proposing to streamline and conform the Rule to Rule 6160 (Multiple MPIDs for Trade Reporting Facility Participants). The standards and processes applicable to the assignment and use of multiple MPIDs are the same for ADF and TRF participants, and as such, FINRA believes that the rules should be identical, to the extent possible.

As amended, paragraph (b) of Rule 6170 would provide that any ADF participant (which would include a member that uses the ADF for trade reporting only) that is required to obtain, or otherwise wishes to use, more than one MPID for purposes of displaying quotes/orders or reporting trades to the ADF must submit a written request, in the form required by FINRA, to, and obtain approval from, FINRA Market Operations for such additional MPID(s). As amended, this paragraph would conform to the language of current Rule 6160(a). Paragraph (c) of Rule 6170, which currently applies only to Registered Reporting ADF ECNs, would be amended to apply to "ADF Market Participants" (which term encompasses both categories of ADF quoting participant, *i.e.*, Registered Reporting ADF ECNs as well as Registered Reporting ADF Market Makers) and to conform to the language of Rule 6160(b).

FINRA also is proposing to amend and reorganize the Supplementary Material under Rule 6170 to conform to Rule 6160 and to delete unnecessary, and in places repetitive, language regarding the specifics of assigning "Primary" and "Additional" MPIDs. As amended, Rule 6170.01 would apply to any ADF participant (which would include a member that uses the ADF for trade reporting purposes only) and provide that an ADF participant must identify the purpose(s) and system(s) for which the multiple MPIDs will be used. If FINRA determines that the use of multiple MPIDs is detrimental to the marketplace, or that an ADF participant is using one or more additional MPIDs improperly or for other than the purpose(s) identified by the member, FINRA staff retains full discretion to limit or withdraw its grant of the additional MPID(s) to such ADF participant for purposes of displaying quotes/orders or reporting trades through the ADF. This language incorporates language in current Rule 6170.01 and .05 and conforms to the language of Rule 6160.01.

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[11] FINRA notes that members using a web browser for trade reporting generally have relatively low volume, since it would be difficult for a member with significant volume to meet its 10-second trade reporting obligation under FINRA rules. Thus, FINRA expects that members using the web browser for trade reporting to the ADF will not put the same demands on the ADF system as firms reporting more significant volume using a FIX connection. As such, FINRA does not believe that it is necessary to require web browser users to participate in annual testing.

[12] FINRA will develop capacity projections for members that will use the ADF for trade reporting purposes only based on their current usage of a TRF, and members may be asked to review and confirm these projections from time to time. If a member's volume on a TRF increases by more than 20% from one year to the next, the member would be required to participate in capacity/stress testing to retain connectivity to the ADF for use as a secondary facility for trade reporting.

[13] Pursuant to Rule 7530(c)(1), members are charged $333 per hour for testing with the ADF, subject to the exceptions identified in paragraph (c)(2) of the Rule.

[14] FINRA notes that the proposed fee would be in addition to any charges firms must pay NASDAQ, as FINRA's technology provider for the ADF, under NASDAQ rules. For example, firms that report to the ADF via FIX—either directly or indirectly through third party intermediaries (*e.g.*, service bureaus)—would pay NASDAQ charges associated with FIX ports to connect to the ADF data center. *See, e.g.*, NASDAQ Rule 7015.

[15] Pursuant to this rule, the charge for ADF terminal software is $275 a month per terminal and $550 a month for each server.

[16] Members that submit trades to the ADF, via FIX or web browser, also would be subject to the trade reporting fees under current Rule 7510(a), which fees are assessed on a per reported transaction basis.

Amended Rule 6170.02 would continue to provide that each MPID belonging to a Registered Reporting ADF ECN is subject to the requirements of Rule 6279 (Alternative Trading Systems). Rule 6170.03 would be amended to apply to "ADF Market Participants," which would encompass both categories of ADF quoting participant, and provide that if an ADF Market Participant no longer fulfills the conditions appurtenant to one of its MPIDs (*e.g.,* by being placed into an unexcused withdrawal), it may not use another MPID for any purpose in that security. Rules 6170.04 and .05 would be deleted in their entirety.[17]

Second, FINRA is proposing to amend paragraph (c)(1) of Rule 7510 (System Related Fees) to clarify that the web browser fee of $20 per month per user ID will apply to all ADF participants, including members that use the ADF for trade reporting purposes only. The provision currently applies only to "ADF Market Participants," which term is defined as a Registered Reporting ADF Market Maker or a Registered Reporting ADF ECN.

Finally, FINRA is proposing to delete paragraph (a)(9) of Rule 6220. The term "Non-Registered Reporting Member" is not used in the ADF rule set and as such should no longer be included in the definitions under Rule 6220.

FINRA has filed the proposed rule change for immediate effectiveness and the operative date will be 30 days from the date of filing.

2. Statutory Basis

FINRA believes that the proposed rule change is consistent with the provisions of Section 15A(b)(6) of the Act,[18] which requires, among other things, that FINRA rules must be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest. FINRA believes that the proposed rule change is consistent with the Act because it provides members with an alternative for meeting their trade reporting obligations under FINRA rules and will allow members that wish to connect to a secondary facility for trade reporting in accordance with the *Trade Reporting Notice* to continue executing OTC trades in NMS stocks in the event their primary facility is experiencing a widespread systems issue.

In addition, FINRA believes that the proposed rule change is consistent with the provisions of Section 15A(b)(5) of the Act,[19] which requires, among other things, that FINRA rules provide for the equitable allocation of reasonable dues, fees and other charges among members and issuers and other persons using any facility or system that FINRA operates or controls. FINRA believes that the proposed rule change to apply the web browser fee under Rule 7510(c)(1) and the proposed FIX connectivity fee under Rule 7520 for members that use the ADF for trade reporting purposes only are reasonable in light of FINRA's regulatory and operational costs, including personnel, infrastructure and technology costs. FINRA further believes that the proposed fees are equitably allocated and not unfairly discriminatory because they will apply uniformly to all similarly situated members (*i.e.,* the web browser fee will apply uniformly to all members that elect to use the web browser and the FIX connectivity fee will apply uniformly to all members that elect to connect to the ADF via FIX for trade reporting purposes only).

B. Self-Regulatory Organization's Statement on Burden on Competition

FINRA does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

Economic Impact Analysis

As an initial matter, the *Trade Reporting Notice* applies only to members that have the trade reporting obligation under FINRA rules.[20] Today, on average, several hundred firms execute and report OTC trades in NMS stocks to the TRFs on a regular basis. Many firms, including smaller firms, route their order flow to another firm, *e.g.,* their clearing firm, for execution, and as the routing firm, they do not have the trade reporting obligation. Thus, the proposed rule change will have no impact on many members.

Moreover, members are not required to use the ADF for purposes of meeting their trade reporting obligations under FINRA rules. As noted above, the ADF would simply be another option available to members for trade reporting, particularly those members that elect to connect to a secondary facility in accordance with the *Trade Reporting Notice.* Members that determine that the ADF is not a cost-effective option for them (as either a primary or secondary facility for trade reporting) can elect to use one (or both) of the TRFs.

FINRA further notes that the proposed rule change does not create any new trade reporting obligations to members; rather it is designed to provide an alternative for members to meet their existing equity trade reporting obligations. Members that choose to rely upon the ADF as their primary or secondary facility for trade reporting will incur some costs. Members connecting to the ADF will incur a cost of $500 per month per FIX connection or $20 per month per user for web browser access. FINRA believes that members that report via FIX will also likely maintain at least one web user ID. Members reporting via FIX will also incur a NASDAQ charge of $575 per port per month. Members that report trades through the ADF will be assessed charges based upon the existing fee schedule, as detailed in Rule 7510(a).

In addition, members maintaining FIX connectivity to the ADF for trade reporting purposes only will be required to conduct annual testing. The connectivity testing requirement will be waived for members reporting at least 100 trades per month through the ADF and the capacity/stress testing requirement will be waived for members with reported trading activity that does not increase by more than 20% from the previous year.

By providing an alternative for trade reporting, FINRA is increasing the choices available to members. FINRA anticipates that few members will use the ADF for trade reporting purposes, but this may change as the relative costs for trade reporting services shift. If a member chooses to use the ADF as a primary or secondary trade reporting venue, it will be because it is determined to be advantageous to that member.

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[17] FINRA notes that as amended, Rule 6170.02 and .03 apply to quoting activity, and specifically to Registered Reporting ADF ECNs and ADF Market Participants, respectively, and thus do not correspond to any provisions of Rule 6160. FINRA further notes that Rule 6160.02 applies exclusively to the TRFs and thus there is no corresponding provision in Rule 6170. Otherwise, Rule 6160 and 6170 are substantively identical, differing only with respect to the defined terms used or to reflect the fact that the TRFs are used for trade reporting only and the ADF could be used for both quoting and trade reporting.

[18] 15 U.S.C. 78*o*–3(b)(6).

[19] 15 U.S.C. 78*o*–3(b)(5).

[20] FINRA rules for reporting OTC transactions in equity securities require that for transactions between members, the "executing party" report the trade to a FINRA facility. For transactions between a member and a non-member or customer, the member must report the trade. "Executing party" is defined under FINRA rules as the member that receives an order for handling or execution or is presented an order against its quote, does not subsequently re-route the order, and executes the transaction. *See, e.g.,* Rule 6282(b).

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A) of the Act[21] and Rule 19b–4(f)(6) thereunder.[22] FINRA believes that the filing is appropriately designated as "non-controversial" because the proposed rule change does not create any new trade reporting obligations to members, but rather provides another alternative for members to meet their existing equity trade reporting obligations. Members that do not wish to be subject to the proposed testing requirements and fees or otherwise determine that the ADF is not a cost-effective option for them—as either a primary or secondary facility for trade reporting—can elect to use one (or both) of the TRFs to fulfill their trade reporting obligations under FINRA rules.

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov*. Please include File Number SR–FINRA–2016–031 on the subject line.

Paper Comments

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–FINRA–2016–031. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–FINRA–2016–031 and should be submitted on or before September 14, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[23]

Robert W. Errett,

Deputy Secretary.

[FR Doc. 2016–20203 Filed 8–23–16; 8:45 am]

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[21] 15 U.S.C. 78s(b)(3)(A).

[22] 17 CFR 240.19b–4(f)(6).

[23] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–78613; File No. SR–BatsBZX–2016–35]

Self-Regulatory Organizations; Bats BZX Exchange, Inc.; Notice of Designation of a Longer Period for Commission Action on a Proposed Rule Change To List and Trade Shares of the JPMorgan Global Bond Opportunities ETF

August 18, 2016.

On July 1, 2016, Bats BZX Exchange, Inc. (the "Exchange" or "BZX") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")[1] and Rule 19b–4 thereunder,[2] a proposed rule change to list and trade shares of the JPMorgan Global Bond Opportunities ETF of the J.P. Morgan Exchange-Traded Fund Trust under BZX Rule 14.11(i). The proposed rule change was published for comment in the **Federal Register** on July 14, 2016.[3] The Commission received no comments on the proposed rule change.

Section 19(b)(2) of the Act[4] provides that, within 45 days of the publication of notice of the filing of a proposed rule change, or within such longer period up to 90 days as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or as to which the self-regulatory organization consents, the Commission shall either approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether the proposed rule change should be disapproved. The Commission is extending this 45-day time period.

The Commission finds it appropriate to designate a longer period within which to take action on the proposed rule change so that it has sufficient time to consider the proposed rule change. Accordingly, the Commission, pursuant to Section 19(b)(2) of the Act,[5] designates October 12, 2016 as the date by which the Commission should either approve or disapprove, or institute proceedings to determine whether to disapprove, the proposed rule change (File No. SR–BatsBZX–2016–35).

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[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] *See* Securities Exchange Act Release No. 78264 (July 8, 2016), 81 FR 45546.

[4] 15 U.S.C. 78s(b)(2).

[5] *Id.*

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[6]

Robert W. Errett,

Deputy Secretary.

[FR Doc. 2016–20207 Filed 8–23–16; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–78616; File No. SR–NASDAQ–2016–104]

Self-Regulatory Organizations; The Nasdaq Stock Market LLC; Notice of Filing of Proposed Rule Change To Amend Nasdaq Rule 5735 To Adopt Generic Listing Standards for Managed Fund Shares

August 18, 2016.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on August 16, 2016, The Nasdaq Stock Market LLC ("Nasdaq" or "Exchange") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend Nasdaq Rule 5735 to adopt generic listing standards for Managed Fund Shares.

The text of the proposed rule change is available on the Exchange's Web site at *http://nasdaq.cchwallstreet.com,* at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend Nasdaq Rule 5735 to adopt generic listing standards for Managed Fund Shares, as well as to make additional changes as described below. Under the Exchange's current rules, a proposed rule change must be filed with the Commission for the listing and trading of each new series of Managed Fund Shares. The Exchange believes that it is appropriate to codify certain rules within Rule 5735 that would generally eliminate the need for such proposed rule changes, which would create greater efficiency and promote uniform standards in the listing process.[3]

Background

Rule 5735 sets forth certain rules related to the listing and trading of Managed Fund Shares.[4] Under Rule 5735(c)(1), the term "Managed Fund Share" means a security that:

(a) Represents an interest in a registered investment company ("Investment Company") organized as an open-end management investment company or similar entity, that invests in a portfolio of securities selected by the Investment Company's investment adviser (hereafter "Adviser") consistent with the Investment Company's investment objectives and policies;

(b) is issued in a specified aggregate minimum number in return for a deposit of a specified portfolio of securities and/or a cash amount with a value equal to the next determined net asset value; and

(c) when aggregated in the same specified minimum number, may be redeemed at a holder's request, which holder will be paid a specified portfolio of securities and/or cash with a value equal to the next determined net asset value.

Effectively, Managed Fund Shares are securities issued by an actively-managed open-end Investment Company (*i.e.,* an actively-managed exchange-traded fund ("ETF")). Because Managed Fund Shares are actively-managed, they do not seek to replicate the performance of a specified passive index of securities. Instead, they generally use an active investment strategy to seek to meet their investment objectives. In contrast, an open-end Investment Company that issues Index Fund Shares, listed and traded on the Exchange pursuant to Nasdaq Rule 5705(b), seeks to provide investment results that generally correspond to the price and yield performance of a specific foreign or domestic stock index, fixed income securities index, or combination thereof.

All Managed Fund Shares listed and/or traded pursuant to Rule 5735 (including pursuant to unlisted trading privileges) are subject to the full panoply of Exchange rules and procedures that currently govern the trading of equity securities on the Exchange.[5]

In addition, Rule 5735(d) currently provides for the criteria that Managed Fund Shares must satisfy for initial and continued listing on the Exchange, including, for example, that a minimum number of Managed Fund Shares are required to be outstanding at the time of commencement of trading on the Exchange. However, the current process for listing and trading new series of Managed Fund Shares on the Exchange requires that the Exchange submit a proposed rule change with the Commission. In this regard, Rule 5735(b)(1) specifies that the Exchange will file separate proposals under Section 19(b) of the Act (hereafter, a "proposed rule change") before listing and trading shares of an issue of Managed Fund Shares.

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[6] 17 CFR 200.30–3(a)(31).

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] Except as noted below, this proposed rule change is substantively identical to changes approved by the Commission to NYSE Arca Equities Rule 8.600. *See* Securities Exchange Act Release No. 78397 (July 22, 2016) (SR–NYSEArca–2015–110) (order approving generic listing standards for Managed Fund Shares listed per NYSE Arca Equities Rule 8.600). The definition of "Exchange Traded Derivative Securities" provided in proposed Rule 5735(c)(6) is similar to, but more narrow than, the definition of "Derivative Securities Product" used in NYSE Arca Rule 8.600 because the proposed definition of Exchange Traded Derivative Securities does not include an Exchange rule comparable to NYSE Arca Equities Rule 8.400 (Paired Trust Shares). In addition, non-substantive changes are made in order to conform the proposal to the structure of the Exchange's current rules. *See also* Securities Exchange Act Release No. 78396 (July 22, 2016) (SR–BATS–2015–100) (order approving generic BATS listing standards for Managed Fund Shares).

[4] *See* Securities Exchange Act Release No. 57962 (June 13, 2008), 73 FR 35175 (June 20, 2008) (SR–NASDAQ–2008–039) (order approving Nasdaq Rule 4420(o) and listing and trading of shares of certain issues of Managed Fund Shares) (the "Approval Order"). The Approval Order approved, among other things, the rules permitting the listing and trading of Managed Fund Shares. Rule 4420(o) was subsequently relocated to Rule 5735. *See* Securities Exchange Act Release No. 59663 (March 31, 2009), 74 FR 15552 (April 6, 2009) (SR–NASDAQ–2009–018).

[5] *See* Approval Order, note 4 above, at 35177.

Proposed Changes to Rule 5735

The Exchange proposes to amend Rule 5735(b)(1) to specify that the Exchange may approve Managed Fund Shares for listing and/or trading (including pursuant to unlisted trading privileges) pursuant to SEC Rule 19b–4(e) under the Act, which pertains to derivative securities products ("SEC Rule 19b–4(e)").[6] SEC Rule 19b–4(e)(1) provides that the listing and trading of a new derivative securities product by a self-regulatory organization ("SRO") is not deemed a proposed rule change, pursuant to paragraph (c)(1) of Rule 19b–4,[7] if the Commission has approved, pursuant to section 19(b) of the Act, the SRO's trading rules, procedures, and listing standards for the product class that would include the new derivative securities product and the SRO has a surveillance program for the product class. This is the current method pursuant to which "passive" ETFs are listed under Nasdaq Rule 5705.

The Exchange would also specify within Rule 5735(b)(1) that components of Managed Fund Shares listed pursuant to SEC Rule 19b–4(e) must satisfy, upon initial listing and on a continual basis, certain specific criteria, which the Exchange would include within Rule 5735(b)(1), as described in greater detail below. As proposed, the Exchange would continue to file separate proposed rule changes before the listing and trading of Managed Fund Shares with components that do not satisfy the additional criteria described below or components other than those specified below. For example, if the components of a Managed Fund Share exceeded one of the applicable thresholds, the Exchange would file a separate proposed rule change before listing and trading such Managed Fund Share. Similarly, if the components of a Managed Fund Share included a security or asset that is not specified below, the Exchange would file a separate proposed rule change.

The Exchange would also add to Rule 5735(c) to provide that the Web site for each series of Managed Fund Shares shall disclose certain information regarding the Disclosed Portfolio, to the extent applicable. The required information includes the following, to the extent applicable: Ticker symbol, CUSIP or other identifier, a description of the holding, identity of the asset upon which the derivative is based, the strike price for any options, the quantity of each security or other asset held as measured by select metrics, maturity date, coupon rate, effective date, market value, and percentage weight of the holding in the portfolio.[8]

In addition, the Exchange would amend Rule 5735(d) to specify that all Managed Fund Shares must have a stated investment objective, which must be adhered to under normal market conditions.[9]

Finally, the Exchange would also amend the continued listing requirement in Rule 5735(d)(2)(A) by changing the requirement that an Intraday Indicative Value for Managed Fund Shares be widely disseminated by one or more major market data vendors at least every 15 seconds during the time when the Managed Fund Shares trade on the Exchange to a requirement that an Intraday Indicative Value be widely disseminated by one or more major market data vendors at least every 15 seconds during the Regular Market Session (as defined in Nasdaq Rule 4120(b)).

Proposed Managed Fund Share Portfolio Standards

The Exchange is proposing standards that would pertain to Managed Fund Shares to qualify for listing and trading pursuant to SEC Rule 19b–4(e). These standards would be grouped according to security or asset type. The Exchange notes that the standards proposed for a Managed Fund Share portfolio that holds U.S. Component Stocks, Non-U.S. Component Stocks, Exchange Traded Derivative Securities, and Linked Securities are based in large part on the existing equity security standards applicable to Index Fund Shares in Rule 5705(b)(3).

The standards proposed for a Managed Fund Share portfolio that holds fixed income securities are based in large part on the existing fixed income security standards applicable to Index Fund Shares in Rule 5705(b)(4). Many of the standards proposed for other types of holdings in a Managed Fund Share portfolio are based on previous proposed rule changes for specific series of Managed Fund Shares.[10]

Proposed Rule 5735(b)(1)(A) would describe the standards for a Managed Fund Share portfolio that holds equity securities, which are defined to be U.S. Component Stocks,[11] Non-U.S. Component Stocks,[12] Exchange Traded

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[6] 17 CFR 240.19b–4(e). As provided under SEC Rule 19b–4(e), the term "new derivative securities product" means any type of option, warrant, hybrid securities product, or any other security, other than a single equity option or a security futures product, whose value is based, in whole or in part, upon the performance of, or interest in, an underlying instrument.

[7] 17 CFR 240.19b–4(c)(1). As provided under SEC Rule 19b–4(c)(1), a stated policy, practice, or interpretation of the SRO shall be deemed to be a proposed rule change unless it is reasonably and fairly implied by an existing rule of the SRO.

[8] Proposed rule changes for previously-listed series of Managed Fund Shares have similarly included disclosure requirements with respect to each portfolio holding, as applicable to the type of holding. *See, e.g.,* Securities Exchange Act Release No. 77688 (April 22, 2016), 81 FR 25467 (April 28, 2016) (SR–NASDAQ–2016–030) (the "Elkhorn Dorsey Wright Commodity Rotation Portfolio of Elkhorn ETF Trust Approval"), generally and at 14147. *See also* Securities Exchange Act Release No. 72666 (July 3, 2014), 79 FR 44224 (July 30, 2014) (SR–NYSEArca–2013–122) (the "PIMCO Total Return Use of Derivatives Approval"), generally and at 44227.

[9] The Exchange would also add a new defined term under Rule 5735(c)(5) to specify that the term "normal market conditions" includes, but is not limited to, the absence of trading halts in the applicable financial markets generally; operational issues (*e.g.,* systems failure) causing dissemination of inaccurate market information; or force majeure type events such as a natural or man-made disaster, act of God, armed conflict, act of terrorism, riot or labor disruption or any similar intervening circumstance.

[10] *See, e.g.,* Securities Exchange Act Release No. 77688 (April 22, 2016), 81 FR 25467 (April 28, 2016) (SR–NASDAQ–2016–030) (order approving listing and trading of Elkhorn Dorsey Wright Commodity Rotation Portfolio of Elkhorn ETF Trust). *See also* Securities Exchange Act Release Nos. 72728 (July 31, 2014) 79 FR 45852 (August 6, 2014) (SR–NASDAQ–2014–059) (order approving listing and trading of Global X Commodities Strategy ETF); 72506 (July 1, 2014), 79 FR 38631 (July 8, 2014) (SR–NASDAQ–2014–050) (order approving listing and trading of First Trust Strategic Income ETF); 69464 (April 26, 2013), 78 FR 25774 (May 2, 2013) (SR–NASDAQ–2013–036) (order approving listing and trading of First Trust Senior Loan Fund); and 66489 (February 29, 2012), 77 FR 13379 (March 6, 2012) (SR–NASDAQ–2012–004) (order approving listing and trading of WisdomTree Emerging Markets Corporate Bond Fund). *See also* Securities Exchange Act Release Nos. 66321 (February 3, 2012), 77 FR 6850 (February 9, 2012) (SR–NYSEArca–2011–95) (the "PIMCO Total Return Approval"); 69244 (March 27, 2013), 78 FR 19766 (April 2, 2013) (SR–NYSEArca–2013–08) (the "SPDR Blackstone/GSO Senior Loan Approval"); 68870 (February 8, 2013), 78 FR 11245 (February 15, 2013) (SR–NYSEArca–2012–139) (the "First Trust Preferred Securities and Income Approval"); 69591 (May 16, 2013), 78 FR 30372 (May 22, 2013) (SR–NYSEArca–2013–33) (the "International Bear Approval"); 61697 (March 12, 2010), 75 FR 13616 (March 22, 2010) (SR–NYSEArca–2010–04) (the "WisdomTree Real Return Approval"); and 67054 (May 24, 2012), 77 FR 32161 (May 31, 2012) (SR–NYSEArca–2012–25) (the "WisdomTree Brazil Bond Approval"). Certain standards proposed herein for Managed Fund Shares are also based on previous proposed rule changes for specific series of Index Fund Shares for which Commission approval for listing was required due to the Index Fund Shares not satisfying certain standards of Rule 5705(b)(3) and 5705(b)(4). On NYSE Arca, similar products under NYSE Commentary .01 and .02 to NYSE Arca Equities Rule 5.2(j)(3) are called Investment Company Units. *See, e.g.,* Securities Exchange Act Release No. 69373 (April 15, 2013), 78 FR 23601 (April 19, 2013) (SR–NYSEArca–2012–108) (the "NYSE Arca U.S. Equity Synthetic Reverse Convertible Index Fund Approval").

[11] For the purposes of Rule 5735(b)(1) and this proposal, the term "U.S. Component Stocks" would have the same meaning as defined in Rule 5705(b)(1)(D).

[12] For the purposes of Rule 5735(b)(1) and this proposal, the term "Non-U.S. Component Stocks" would have the same meaning as defined in Rule 5705(b)(1)(E).

Derivative Securities,[13] and Linked Securities [14] listed on a national securities exchange. For Exchange Traded Derivative Securities and Linked Securities, no more than 25% of the equity weight of the portfolio could include leveraged and/or inverse leveraged Exchange Traded Derivative Securities or Linked Securities. In addition, proposed rule 5735(b)(1)(A) would provide that, to the extent that a portfolio includes convertible securities, the equity security into which such security is converted would be required to meet the criteria of 5735(b)(1)(A) after converting.

As proposed in Rule 5735(b)(1)(A)(i), the component stocks of the equity portion of a portfolio that are U.S. Component Stocks shall meet the following criteria initially and on a continuing basis:

(1) Component stocks (excluding Exchange Traded Derivative Securities and Linked Securities) that in the aggregate account for at least 90% of the equity weight of the portfolio (excluding such Exchange Traded Derivative Securities and Linked Securities) each must have a minimum market value of at least $75 million; [15]

(2) Component stocks (excluding Exchange Traded Derivative Securities and Linked Securities) that in the aggregate account for at least 70% of the equity weight of the portfolio (excluding such Exchange Traded Derivative Securities and Linked Securities) each must have a minimum monthly trading volume of 250,000 shares or minimum notional volume traded per month of $25,000,000, averaged, over the last six months; [16]

(3) The most heavily weighted component stock (excluding Exchange Traded Derivative Securities and Linked Securities) must not exceed 30% of the equity weight of the portfolio, and, to the extent applicable, the five most heavily weighted component stocks (excluding Exchange Traded Derivative Securities and Linked Securities) must not exceed 65% of the equity weight of the portfolio; [17]

(4) Where the equity portion of the portfolio does not include Non-U.S. Component Stocks, the equity portion of the portfolio shall include a minimum of 13 component stocks; provided, however, that there shall be no minimum number of component stocks if (a) one or more series of Exchange Traded Derivative Securities or Linked Securities constitute, at least in part, components underlying a series of Managed Fund Shares, or (b) one or more series of Exchange Traded Derivative Securities or Linked Securities account for 100% of the equity weight of the portfolio of a series of Managed Fund Shares; [18]

(5) Except as provided in proposed Rule 5735(b)(1)(A), equity securities in the portfolio must be U.S. Component Stocks listed on a national securities exchange and must be NMS Stocks as defined in Rule 600 of Regulation NMS; [19] and

(6) American Depositary Receipts (''ADRs'') may be exchange-traded or non-exchange-traded. However no more than 10% of the equity weight of the portfolio shall consist of non-exchange-traded ADRs.[20]

As proposed in Rule 5735(b)(1)(A)(ii), the component stocks of the equity portion of a portfolio that are Non-U.S. Component Stocks shall meet the following criteria initially and on a continuing basis:

(1) Non-U.S. Component Stocks each shall have a minimum market value of at least $100 million; [21]

(2) Non-U.S. Component Stocks each shall have a minimum global monthly trading volume of 250,000 shares, or minimum global notional volume traded per month of $25,000,000, averaged over the last six months; [22]

(3) The most heavily weighted Non-U.S. Component Stock shall not exceed 25% of the equity weight of the portfolio, and, to the extent applicable, the five most heavily weighted Non-U.S. Component Stocks shall not exceed 60% of the equity weight of the portfolio; [23]

(4) Where the equity portion of the portfolio includes Non-U.S. Component Stocks, the equity portion of the portfolio shall include a minimum of 20 component stocks; provided, however, that there shall be no minimum number of component stocks if (i) one or more series of Exchange Traded Derivative

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[13] For the purposes of Rule 5735(b)(1)(A) and this proposal, proposed Rule 5735(c)(6) would define the term ''Exchange Traded Derivative Securities'' to mean the securities described in Nasdaq Rules 5705(a) (Portfolio Depository Receipts); 5705(b) (Index Fund Shares); 5720 (Trust Issued Receipts); 5711(d) (Commodity-Based Trust Shares); 5711(e) (Currency Trust Shares); 5711(f), (Commodity Index Trust Shares); 5711(g) (Commodity Futures Trust Shares); 5711(h) (Partnership Units); 5711(i) (Trust Units); 5735 (Managed Fund Shares); and 5711(j) (Managed Trust Securities). This proposed definition is more narrow than the term ''Derivative Securities Product,'' as defined in Nasdaq Rule 4120(b)(4)(A) and used in Rule 5705(b), because it excludes certain securities including NextShares. It is also more narrow than the term ''Derivative Securities Product'' as defined in commentary .01(a) to NYSE Arca Rule 8.600 because it excludes Paired Trust Shares.

[14] Linked Securities are securities that qualify for Exchange listing and trading under Rule 5710. The securities described in Rules 5705, 5710, and 5735(c)(6), as referenced above, would include securities listed on another national securities exchange pursuant to substantially equivalent listing rules.

[15] This proposed text is substantively identical to the corresponding text of Rule 5705(b)(3)(A)(i)a., except for the omission of the reference to ''index,'' which is not applicable, the substitution of a more narrow exclusion for ''Exchange Traded Derivative Securities'' instead of for ''Derivative Securities Products,'' and the addition of the reference to Linked Securities.

[16] This proposed text is substantively identical to the corresponding text of Rule 5705(b)(3)(A)(i)b., except for the omission of the reference to ''index,'' which is not applicable, the substitution of a more narrow exclusion for ''Exchange Traded Derivative Securities'' instead of for ''Derivative Securities Products,'' and the addition of the reference to Linked Securities.

[17] This proposed text is substantively identical to the corresponding text of Rule 5705(b)(3)(A)(i)c., except for the omission of the reference to ''index,'' which is not applicable, the substitution of a more narrow exclusion for ''Exchange Traded Derivative Securities'' instead of for ''Derivative Securities Products,'' and the addition of the reference to Linked Securities.

[18] This proposed text is substantively identical to the corresponding text of Rule 5705(b)(3)(A)(i)d., except for the omission of the reference to ''index,'' which is not applicable, the addition of the reference to Linked Securities, the substitution of a more narrow exclusion for ''Exchange Traded Derivative Securities'' instead of for ''Derivative Securities Products,'' and the reference to the 100% limit applying to the ''equity portion'' of the portfolio.

[19] 17 CFR 240.600. This proposed text is substantively identical to the corresponding text of Rule 5705(b)(3)(A)(i)e., except for the addition of ''equity'' to make clear that the standard applies to ''equity securities,'' the exclusion of unsponsored ADRs, and the omission of the reference to ''index,'' which is not applicable.

[20] Proposed rule changes for previously-listed series of Managed Fund Shares have similarly included the ability for such Managed Fund Shareholdings to include not more than 10% of net assets in unsponsored ADRs (which are not exchange-listed). *See, e.g.,* Securities Exchange Act Release No. 73480 (October 31, 2014), 79 FR 66022 (November 6, 2014) (SR–NASDAQ–2014–090) (order approving the Listing and Trading of Shares of the Validea Market Legends ETFs). *See also* Securities Exchange Act Release No. 71067 (December 12, 2013), 78 FR 76669 (December 18, 2013) (order approving listing and trading of shares of the SPDR MFS Systematic Core Equity ETF, SPDR MFS Systematic Growth Equity ETF, and SPDR MFS Systematic Value Equity ETF under NYSE Arca Equities Rule 8.600).

[21] The proposed text is identical to the corresponding representations from the First Trust Approval Order and the SSgA Global Managed Volatility Release, as noted in footnote 28, below. The proposed text is also substantively identical to the corresponding text of Rule 5705(b)(3)(A)(ii)a., except for the omission of the reference to ''index,'' which is not applicable, and that each Non-U.S. Component Stock must have a minimum market value of at least $100 million instead of the 90% required under Rule 5705(b)(3)(A)(ii)a.

[22] The proposed text is identical to the corresponding representations from the First Trust Approval Order and the SSgA Global Managed Volatility Release, as noted in footnote 28, below. This proposed text also is substantively identical to the corresponding text of Rule 5705(b)(3)(A)(ii)b., except for the omission of the reference to ''index,'' which is not applicable.

[23] This proposed text is substantively identical to the corresponding text of Rule 5705(b)(3)(A)(ii)c., except for the omission of the reference to ''index,'' which is not applicable.

Securities or Linked Securities constitute, at least in part, components underlying a series of Managed Fund Shares, or (ii) one or more series of Exchange Traded Derivative Securities or Linked Securities account for 100% of the equity weight of the portfolio of a series of Managed Fund Shares[24]; and

(5) Each Non-U.S. Component Stock shall be listed and traded on an exchange that has last-sale reporting.[25]

The Exchange notes that it is not proposing to require that any of the equity portion of the equity portfolio composed of Non-U.S. Component Stocks be listed on markets that are either a member of the Intermarket Surveillance Group ("ISG") or a market with which the Exchange has a comprehensive surveillance sharing agreement ("CSSA").[26] However, as further detailed below, the regulatory staff of the Exchange, or the Financial Industry Regulatory Authority, Inc. ("FINRA"), on behalf of the Exchange, will communicate as needed regarding trading in Managed Fund Shares with other markets that are members of the ISG, including U.S. securities exchanges on which the components are traded.

The Exchange notes that the generic listing standards for Index Fund Shares based on foreign indexes in Rule 5705 do not include specific ISG or CSSA requirements.[27] In addition, the Commission has approved listing and trading on the Exchange of shares of an issue of Managed Fund Shares under Rule 5735 where non-U.S. equity securities in such issue's portfolio meet specified criteria and where there is no requirement that such non-U.S. equity securities are traded in markets that are members of ISG or with which the Exchange has in place a CSSA.[28]

Proposed Rule 5735(b)(1)(B) would describe the standards for a Managed Fund Share portfolio that holds fixed income securities, which are debt securities[29] that are notes, bonds, debentures, or evidence of indebtedness that include, but are not limited to, U.S. Department of Treasury securities ("Treasury Securities"), government-sponsored entity securities ("GSE Securities"), municipal securities, trust preferred securities, supranational debt and debt of a foreign country or a subdivision thereof, investment grade and high yield corporate debt, bank loans, mortgage and asset backed securities, and commercial paper.

In addition, to the extent that a portfolio includes convertible securities, the fixed income security into which such security is converted would be required to meet the criteria of Rule 5735(b)(1)(B) after converting.

The components of the fixed income portion of the portfolio must meet the following criteria initially and on a continuing basis:

(1) Components that in the aggregate account for at least 75% of the fixed income weight of the portfolio each shall have a minimum original principal amount outstanding of $100 million or more;[30]

(2) No component fixed-income security (excluding Treasury Securities and GSE Securities) could represent more than 30% of the fixed income weight of the portfolio, and the five most heavily weighted component fixed income securities in the portfolio (excluding Treasury Securities and GSE Securities) must not in the aggregate account for more than 65% of the fixed income weight of the portfolio;[31]

(3) An underlying portfolio (excluding exempted securities) that includes fixed income securities must include a minimum of 13 non-affiliated issuers; provided, however, that there shall be no minimum number of non-affiliated issuers required for fixed income securities if at least 70% of the weight of the portfolio consists of equity securities as described in proposed Rule 5735(b)(1)(A).[32]

(4) Component securities that in aggregate account for at least 90% of the fixed income weight of the portfolio must be either (a) from issuers that are required to file reports pursuant to Sections 13 and 15(d) of the Act; (b) from issuers that have a worldwide market value of its outstanding common equity held by non-affiliates of $700 million or more; (c) from issuers that have outstanding securities that are notes, bonds debentures, or evidence of indebtedness having a total remaining principal amount of at least $1 billion[33]; (d) exempted securities as defined in Section 3(a)(12) of the Act; or (e) from issuers that are a government of a foreign country or a political subdivision of a foreign country; and

(5) Non-agency, non-GSE, and privately-issued mortgage-related and other asset-backed securities components of a portfolio shall not account, in the aggregate, for more than 20% of the weight of the fixed income portion of the portfolio.[34]

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[24] This proposed text is substantively identical to the corresponding text of Rule 5705(b)(3)(A)(ii)d., except for the omission of the reference to "index," which is not applicable, the substitution of a more narrow exclusion for "Exchange Traded Derivative Securities" instead of for "Derivative Securities Products," the addition of the reference to Linked Securities, the reference to the equity portion of the portfolio including Non-U.S. Component Stocks, and the reference to the 100% limitation applying to the "equity weight" of the portfolio, which is included because the proposed standards in Rule 5735(b) permit the inclusion of non-equity securities, whereas Rule 5705 applies only to equity securities.

[25] This proposed text is substantively identical to Rule 5705(b)(3)(A)(ii)e. as it relates to Non-U.S. Component Stocks.

[26] ISG is comprised of an international group of exchanges, market centers, and market regulators that perform front-line market surveillance in their respective jurisdictions. *See www.isgportal.org.* A list of ISG members is available at *www.isgportal.org.*

[27] Under Rule 5705(b)(3), Index Fund Shares with components that include Non-U.S. Component Stocks can hold a portfolio that is entirely composed of Non-U.S. Component Stocks that are listed on markets that are neither members of ISG, nor with which the Exchange has in place a CSSA.

[28] *See, e.g.,* Securities Exchange Act Release No. 77548 (April 6, 2016), 81 FR 21626 (April 12, 2016) (SR–NASDAQ–2015–161) (order approving listing and trading of the Shares of the First Trust RiverFront Dynamic Europe ETF, First Trust RiverFront Dynamic Asia Pacific ETF, First Trust RiverFront Dynamic Emerging Markets ETF, and First Trust RiverFront Dynamic Developed International ETF of First Trust Exchange-Traded Fund III) (the "First Trust Approval Order"). *See also* Securities Exchange Act Release No. 75023 (May 21, 2015), 80 FR 30519 (May 28, 2015) (SR–NYSEArca–2014–100) (order approving listing and trading on the Exchange of shares of the SPDR SSgA Global Managed Volatility ETF under NYSE Arca Equities Rule 8.600) ("SSgA Global Managed Volatility Release").

[29] Debt securities include a variety of fixed income obligations, including, but not limited to, corporate debt securities, government securities, municipal securities, convertible securities, and mortgage-backed securities. Debt securities include investment-grade securities, non-investment-grade securities, and unrated securities. Debt securities also include variable and floating rate securities.

[30] This text of proposed Rule 5735(b)(1)(B)(i) is based on the corresponding text of Rule 5705(b)(4)(A)(ii).

[31] This proposed text is substantively identical to the corresponding text of 5705(b)(4)(A)(iv), except for the omission of the reference to "index," which is not applicable.

[32] This proposed text is substantively identical to the corresponding text of Rule 5705(b)(4)(A)(v), except for the omission of the reference to "index," which is not applicable, the exclusion of the text "consisting entirely of exempted securities" and the provision that there shall be no minimum number of non-affiliated issuers required for fixed income securities if at least 70% of the weight of the portfolio consists of equity securities as described in proposed Rule 5735(b)(1)(A).

[33] With respect to subparagraphs (b) and (c) above, the special purpose vehicle ("SPV") that issues the fixed income security (*e.g.,* an asset-backed or mortgage-backed security) would itself be required to satisfy the $700 million and $1 billion criteria, respectively, and not the entity that controls, owns or is affiliated with the SPV.

[34] Proposed rule changes for previously-listed series of Managed Fund Shares have similarly included the ability for such Managed Fund Share holdings to include up to 20% of net assets in non-agency, non-GSE and privately-issued mortgage-related and other asset-backed securities. *See, e.g.,* Securities Exchange Act Release No. 74742 (April 16, 2015) 80 FR 22584 (April 22, 2015) (SR–NASDAQ–2015–011) (order approving the listing and trading of shares of the First Trust Strategic Floating Rate ETF of First Trust Exchange-Traded Fund IV. *See also,* Securities Exchange Act Release No. 75566 (July 30, 2015), 80 FR 46612 (August 5,

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Proposed Rule 5735(b)(1)(C) would describe the standards for a Managed Fund Share portfolio that holds cash and cash equivalents.[35] Specifically, the portfolio may hold short-term instruments with maturities of less than 3 months. There would be no limitation to the percentage of the portfolio invested in such holdings. Short-term instruments would include the following:[36]

(1) U.S. Government securities, including bills, notes, and bonds differing as to maturity and rates of interest, which are either issued or guaranteed by the U.S. Treasury or by U.S. Government agencies or instrumentalities;

(2) certificates of deposit issued against funds deposited in a bank or savings and loan association;

(3) bankers' acceptances, which are short-term credit instruments used to finance commercial transactions;

(4) repurchase agreements and reverse repurchase agreements;

(5) bank time deposits, which are monies kept on deposit with banks or savings and loan associations for a stated period of time at a fixed rate of interest;

(6) commercial paper, which are short-term unsecured promissory notes; and

(7) money market funds.

Proposed Rule 5735(b)(1)(D) would describe the standards for a Managed Fund Share portfolio that holds listed derivatives, including futures, options, and swaps on commodities, currencies, and financial instruments (*e.g.,* stocks, fixed income, interest rates, and volatility) or a basket or index of any of the foregoing.[37] There would be no limitation to the percentage of the portfolio invested in such holdings, subject to the following requirements:

(1) In the aggregate, at least 90% of the weight of such holdings invested in futures, exchange-traded options, and listed swaps shall, on both an initial and continuing basis, consist of futures, options, and swaps for which the Exchange may obtain information via the ISG from other members or affiliates of the ISG or for which the principal market is a market with which the Exchange has a comprehensive surveillance sharing agreement (For purposes of calculating this limitation, a portfolio's investment in listed derivatives will be calculated as the aggregate gross notional value of the listed derivatives.); and

(2) the aggregate gross notional value of listed derivatives based on any five or fewer underlying reference assets shall not exceed 65% of the weight of the portfolio (including gross notional exposures), and the aggregate gross notional value of listed derivatives based on any single underlying reference asset shall not exceed 30% of the weight of the portfolio (including gross notional exposures).

Proposed Rule 5735(b)(1)(E) would describe the standards for a Managed Fund Share portfolio that holds over the counter ("OTC") derivatives, including forwards, options and swaps on commodities, currencies and financial instruments (*e.g.,* stocks, fixed income, interest rates, and volatility) or a basket or index of any of the foregoing.[38] Proposed Rule 5735(b)(1)(E) would provide that, on both an initial and continuing basis, no more than 20% of the assets in the portfolio may be invested in OTC derivatives. For purposes of calculating this limitation, a portfolio's investment in OTC derivatives will be calculated as the aggregate gross notional value of the OTC derivatives.

Proposed Rule 5735(b)(1)(F) would provide that, to the extent that listed or OTC derivatives are used to gain exposure to individual equities and/or fixed income securities, or to indexes of equities and/or fixed income securities, the aggregate gross notional value of such exposure shall meet the criteria set forth in Rules 5735(b)(1)(A) and (B) (including gross notional exposures), respectively.

The following examples illustrate how certain of the proposed generic criteria of Rule 5735 would be applied:

1. An actively managed ETF holds non-agency MBS that represent 15% of the weight of the fixed income portion of the portfolio. The fixed income portion of the portfolio meets all the requirements of Rule 5735(b)(1)(B). The ETF also holds an OTC swap on a non-agency MBS Index that represents 10% of the fixed income weight of the portfolio calculated on a notional value basis. Separately, the OTC swap and fixed income portion of the portfolio would meet the requirements of Rule 5735(b)(1). However, when the 15% weight in non-agency MBS and the 10% weight in the non-agency MBS Index OTC swap are combined, as required by proposed 5735(b)(1)(F), the 25% total weight would exceed the 20% limit for non-agency GSE and privately-issued mortgage-related securities in 5735(b)(1)(B)(v). The portfolio, therefore, would not meet the proposed generic criteria of Rule 5735.

2. An actively managed ETF holds a portfolio of non-U.S. equity securities, S&P 500 Index and gold futures. S&P 500 Index futures and the gold futures held by the fund are listed on an ISG member exchange. The equity portion of the portfolio consists of developed and emerging markets equity securities with a current aggregate market value of $15 million and all components meet the requirements under Rule 5735(b)(1)(A)(ii). The gold futures contract trading unit size is 100 troy ounces and an ounce of gold is currently worth $1200. The fund holds 500 gold futures contracts with a notional value of $60 million (500*100*$1200). One S&P 500 contract represents 250 units of the S&P 500 Index and the S&P 500 Index is trading at $2,000. The portfolio holds 50 contracts, so the notional value of the S&P 500 Index futures position is $25 million (50*250*$2000). The S&P 500 Index futures meet the requirement under Rule 5735(b)(1)(F), that is, the S&P 500 Index meets the criteria in Rule 5735(b)(1)(A). The weights of the components are as follows; equity securities represent 15% of the portfolio, gold futures represent 60% of the portfolio and S&P 500 Index futures represent 25% of the portfolio. The gold futures represent 60% of the portfolio and exceeds the 30% concentration limitation on any single underlying reference asset as outlined in proposed Rule 5735(b)(1)(D)(ii). The portfolio, therefore, would not meet the proposed generic criteria of Rule 5735.

2015) (SR–NYSEArca–2015–42) (order approving listing and trading of shares of Newfleet Multi-Sector Unconstrained Bond ETF under Rule 8.600).

[35] Proposed rule changes for previously-listed series of Managed Fund Shares have similarly included the ability for such Managed Fund Share holdings to include cash and cash equivalents. *See, e.g.,* note 10 above regarding approval of NYSE Arca's SPDR Blackstone/GSO Senior Loan, at 19768–69; and First Trust Preferred Securities and Income Approval, at 76150.

[36] Proposed rule changes for previously-listed series of Managed Fund Shares have similarly specified short-term instruments with respect to their inclusion in Managed Fund Share holdings. *See, e.g.,* note 10 above, regarding NYSE Arca's First Trust Preferred Securities and Income Approval, at 76150–51.

[37] Proposed rule changes for previously-listed series of Managed Fund Shares have similarly included the ability for such Managed Fund Share holdings to include listed derivatives. *See, e.g.,* note 10 above, regarding NYSE Arca's WisdomTree Real Return Approval, at 13617; and WisdomTree Brazil Bond Approval, at 32163.

[38] A proposed rule change for series of Index Fund Shares previously listed and traded on the Exchange pursuant to Rule 5705 similarly included the ability for such Index Fund Shares' holdings to include OTC derivatives, specifically OTC down-and-in put options, which are not NMS Stocks as defined in Rule 600 of Regulation NMS and therefore do not satisfy the requirements of Rule 5705. *See, e.g.,* note 10 above, regarding NYSE Arca U.S. Equity Synthetic Reverse Convertible Index Fund Approval, at 23602.

3. An actively managed ETF holds a portfolio of equity securities and call option contracts on company XYZ. The equity portion of the portfolio meets the requirements under Rule 5735(b)(1)(A). Company XYZ represents 20% of the weight of the equity portion of the portfolio. The equity portion of the fund has a market value of $100 million and the market value of the fund's holdings in company XYZ has a market value of $20 million. The fund also holds 10,000 call option contracts on company XYZ which has a current market price of $50 a share and, therefore, a notional value of $50 million (50*100*10,000) (that is, the $50 market price per share times the multiplier of 100 times 10,000 contracts). The option contracts are traded on an ISG member exchange. The total exposure to company XYZ is therefore $70 million and represents 46.7% ($70 million/$150 million=46.7%) of the portfolio. This fund would not meet the requirements of Rule 5735 because the exposure to XYZ at 46.7% exceeds the 30% concentration limitation of proposed Rule 5735(b)(1)(D)(ii).

The Exchange believes that the proposed standards would continue to ensure transparency surrounding the listing process for Managed Fund Shares. Additionally, the Exchange believes that the proposed portfolio standards for listing and trading Managed Fund Shares, many of which track existing Exchange rules relating to Index Fund Shares, are reasonably designed to promote a fair and orderly market for such Managed Fund Shares.[39] These proposed standards would also work in conjunction with the existing initial and continued listing criteria related to surveillance procedures and trading guidelines.

In support of this proposal, the Exchange represents that:[40]

(1) The Managed Fund Shares will continue to conform to the initial and continued listing criteria under Rule 5735;

(2) the Exchange's surveillance procedures are adequate to continue to properly monitor the trading of the Managed Fund Shares in all trading sessions and to deter and detect violations of Exchange rules. Specifically, the Exchange intends to utilize its existing surveillance procedures applicable to derivative products, which will include Managed Fund Shares, to monitor trading in the Managed Fund Shares;

(3) prior to the commencement of trading of a particular series of Managed Fund Shares, the Exchange will inform its members in an information circular ("Circular") of the special characteristics and risks associated with trading the Managed Fund Shares, including procedures for purchases and redemptions of Managed Fund Shares, suitability requirements under Rules 2090A and 2111A, the risks involved in trading the Managed Fund Shares during the Pre-Market and Post-Market Sessions when an updated Portfolio Indicative Value will not be calculated or publicly disseminated, information regarding the Portfolio Indicative Value and the Disclosed Portfolio, prospectus delivery requirements, and other trading information. In addition, the Circular will disclose that the Managed Fund Shares are subject to various fees and expenses, as described in the applicable registration statement, and will discuss any exemptive, no-action, and interpretive relief granted by the Commission from any rules under the Act. Finally, the Circular will disclose that the net asset value for the Managed Fund Shares will be calculated after 4 p.m., ET, each trading day; and

(4) the issuer of a series of Managed Fund Shares will be required to comply with Rule 10A–3 under the Act for the initial and continued listing of Managed Fund Shares, as provided under the Nasdaq Rule 5600 Series.

The Exchange, on a periodic basis and no less than annually, will review issues of Managed Fund Shares generically listed pursuant to Rule 5735, and will provide a report to the Regulatory Oversight Committee of the Exchange's Board of Directors regarding the Exchange's findings. In addition, the Exchange will provide the Commission staff with a report each calendar quarter that includes the following information for issues of Managed Fund Shares listed during such calendar quarter under Rule 5735(b)(1): (1) Trading symbol and date of listing on the Exchange; (2) the number of active authorized participants and a description of any failure of an issue of Managed Fund Shares or of an authorized participant to deliver shares, cash, or cash and financial instruments in connection with creation or redemption orders; and (3) a description of any failure of an issue of Managed Fund Shares to comply with Nasdaq Rule 5735.

Prior to listing pursuant to proposed amended Rule 5735(b)(1), an issuer would be required to represent to the Exchange that it will advise the Exchange of any failure by a series of Managed Fund Shares to comply with the continued listing requirements, and, pursuant to its obligations under Section 19(g)(1) of the Act, the Exchange will monitor for compliance with the continued listing requirements. If the Fund is not in compliance with the applicable listing requirements, the Exchange will commence delisting procedures under the Nasdaq Rule 5800 Series.

The Exchange notes that the proposed change is not otherwise intended to address any other issues and that the Exchange is not aware of any problems that members or issuers would have in complying with the proposed change.

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act,[41] in general, and furthers the objectives of Section 6(b)(5) of the Act,[42] in particular, in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.

The proposed rule change is designed to perfect the mechanism of a free and open market and, in general, to protect investors and the public interest because it would facilitate the listing and trading of additional Managed Fund Shares, which would enhance competition among market participants, to the benefit of investors and the marketplace.

Specifically, after more than six years under the current process, whereby the Exchange is required to file a proposed rule change with the Commission for the listing and trading of each new series of Managed Fund Shares, the Exchange believes that it is appropriate to codify certain rules within Rule 5735 that would generally eliminate the need for separate proposed rule changes.

The Exchange believes that this would facilitate the listing and trading of additional types of Managed Fund Shares that have investment portfolios that are similar to investment portfolios for Index Fund Shares, which have been approved for listing and trading, thereby creating greater efficiencies in the listing process for the Exchange and the Commission.

In this regard, the Exchange notes that the standards proposed for Managed Fund Share portfolios that include U.S. Component Stocks, Non-U.S. Component Stocks, Exchange Traded

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[39] *See* note 4 above, Approval Order, at 35177.

[40] The Exchange made similar representations in the Approval Order. *See id.* at 35177—35178.

[41] 15 U.S.C. 78f(b).

[42] 15 U.S.C. 78f(b)(5).

Derivative Securities, and Linked Securities are based in large part on the existing equity security standards applicable to Index Fund Shares in Rule 5705(b)(3) and that the standards proposed for Managed Fund Share portfolios that include fixed income securities are based in large part on the existing fixed income standards applicable to Index Fund Shares in Rule 5705(b)(4). Additionally, many of the standards proposed for other types of holdings of series of Managed Fund Shares are based on previous proposed rule changes for specific series of Managed Fund Shares.[43]

With respect to the proposed addition to the criteria of Rule 5735(c) to provide that the Web site for each series of Managed Fund Shares shall disclose certain information regarding the Disclosed Portfolio, to the extent applicable, the Exchange notes that proposed rule changes approved by the Commission for previously-listed series of Managed Fund Shares have similarly included disclosure requirements with respect to each portfolio holding, as applicable to the type of holding.[44]

With respect to the proposed definition of the term "normal market conditions" in proposed Rule 5735(c)(5), such definition is similar to the definition of normal market conditions approved by the Commission for other issues of Managed Fund Shares.[45] In addition, proposed Rule 5735(d)(1)(C), would specify that a series of Managed Fund Shares would be required to adhere to its stated investment objective during normal market conditions.

With respect to the proposed amendment to the continued listing requirement in Rule 5735(d)(2)(A) to require dissemination of a Portfolio Indicative Value at least every 15 seconds during the Regular Market Session (as defined in Rule 4120(b)), such requirement conforms to the requirement applicable to the dissemination of the Intraday Indicative Value for Index Fund Shares in Rule 5705(b)(3)(C). In addition, such dissemination is consistent with representations made in proposed rule changes for issues of Managed Fund Shares previously approved by the Commission.[46]

With respect to the proposed requirement in Rule 5735(b)(1)(A) that no more than 25% of the equity weight of the portfolio shall consist of leveraged and/or inverse leveraged Exchange Traded Derivative Securities or Linked Securities, such requirement would assure that only a relatively small proportion of a fund's investments could consist of such leveraged and/or inverse securities. In addition, such limitation would apply to both U.S. Component Stocks and Non-U.S. Component Stocks comprising the equity portion of a portfolio.

With respect to the proposed provision in Rule 5735(b)(1)(A) that, to the extent a portfolio includes a convertible security, the equity security into which such security is converted must meet the criteria in Rule 5735(b)(1)(A) after converting, such requirement would assure that the equity securities into which a convertible security could be converted meet the liquidity and other criteria in Rule 5735(b)(1)(A) applicable to such equity securities.

With respect to the proposed exclusion of Exchange Traded Derivatives Securities and Linked Securities from the requirements of proposed Rule 5735(b)(1)(A), the Exchange believes it is appropriate to exclude Linked Securities as well as Exchange Traded Derivative Securities from certain component stock eligibility criteria for Managed Fund Shares in so far as Exchange Traded Derivative Securities and Linked Securities are themselves subject to specific quantitative listing and continued listing requirements of a national securities exchange on which such securities are listed. Exchange Traded Derivative Securities and Linked Securities that are components of a fund's portfolio would have been listed and traded on a national securities exchange pursuant to a proposed rule change approved by the Commission pursuant to Section 19(b)(2) of the Act[47] or submitted by a national securities exchange pursuant to Section 19(b)(3)(A) of the Act[48] or would have been listed by a national securities exchange pursuant to the requirements of Rule 19b–4(e) under the Act.[49]

The Exchange also notes that Exchange Traded Derivative Securities and Linked Securities are derivatively priced, and, therefore, the Exchange believes that it would not be necessary to apply the proposed generic quantitative criteria (*e.g.,* market capitalization, trading volume, or portfolio component weighting) applicable to equity securities other than Exchange Traded Derivative Securities or Linked Securities (*e.g.,* common stocks) to such products.[50]

With respect to the proposed criteria applicable to U.S. Component Stocks, the Exchange notes that such criteria are similar to those in Rule 5705(b)(3) relating to criteria applicable to an index or portfolio of U.S. Component Stocks. In addition, Non-U.S. Component Stocks also will be required to meet criteria similar to certain generic listing standards in Rule 5705(b)(3) relating to criteria applicable to an index or portfolio of U.S. Component Stocks and Non-U.S. Component Stocks underlying a series of Index Fund Shares to be listed and traded on the Exchange pursuant to Rule 19b–4(e) under the Act.

With respect to the proposed requirement in Rule 5735(b)(1)(A)(i)f. that no more than 10% of the equity weight of the portfolio shall consist of non-exchange-traded ADRs, the Exchange notes that such requirement will ensure that non-exchange-traded ADRs, which are traded OTC and which generally have less market transparency than exchange-traded ADRs, could account for only a small percentage of the equity weight of a portfolio. Further, the requirement is consistent with representations made in proposed rule changes for issues of Managed Fund Shares previously approved by the Commission.[51]

With respect to the proposed provision in Rule 5735(b)(1)(B) that, to the extent a portfolio includes convertible securities, the fixed income security into which such security is converted must meet the criteria in paragraph (B) of Rule 5735(b)(1) after converting, such requirement would assure that the fixed income securities into which a convertible security could be converted meet the liquidity and other criteria in Rule 5735(b)(1)(B) applicable to fixed income securities.

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[43] *See* note 10 above.

[44] *See* note 8 above.

[45] *See, e.g.,* Securities Exchange Act Release No. 73140 (September 18, 2014) 79 FR 57144 (September 24, 2014) (SR–NASDAQ–2014–073) (order approving listing and trading of the First Trust Emerging Markets Local Currency Bond ETF of First Trust Exchange-Traded Fund III. *See also,* Securities Exchange Act Release No. 74338 (February 20, 2015), 80 FR 10556 (February 26, 2015) (SR–NYSEArca–2014–143) (order approving listing and trading of shares of the SPDR Doubletree Total Return Tactical ETF under NYSE Arca Equities Rule 8.600).

[46] *See, e.g.,* Approval Order, note 4 above; and International Bear Approval, note 10 above.

[47] 15 U.S.C. 78s(b)(2).

[48] 15 U.S.C. 78s(b)(3)(A).

[49] 17 CFR 240.19b–4(e).

[50] *See, e.g.,* Securities Exchange Act Release Nos. 57561 (March 26, 2008), 73 FR 17390 (April 1, 2008) (SR–NYSEArca–2008–29) (notice of filing of proposed rule change to amend eligibility criteria for components of an index underlying Investment Company Units); 57751 (May 1, 2008), 73 FR 25818 (May 7, 2008) (SR–NYSEArca–2008–29) (order approving proposed rule change to amend eligibility criteria for components of an index underlying Investment Company Units).

[51] *See* note 20 above.

As proposed, pursuant to Rule 5735(b)(1)(B)(iii), an underlying portfolio (excluding exempted securities) that includes fixed income securities must include a minimum of 13 non-affiliated issuers, but there would be no minimum number of non-affiliated issuers required for fixed income securities if at least 70% of the weight of the portfolio consists of equity securities, as described in Rule 5735(b)(1)(A). The Exchange notes that, when evaluated in conjunction with proposed Rule 5735(b)(1)(B)(ii), the proposed rule is consistent with Rules 5705(b)(4)(A)(iv) and 5705(b)(4)(A)(v) in that it provides for a maximum weighting of a fixed income security in the fixed income portion of the portfolio of a fund that is comparable to the existing rules applicable to Index Fund Shares based on fixed income indexes.

With respect to the proposed requirement in Rule 5735(b)(1)(B)(v) that non-agency, non-GSE and privately-issued mortgage-related and other asset-backed securities components of a portfolio shall not account, in the aggregate, for more than 20% of the weight of the fixed income portion of the portfolio, the Exchange notes that such requirement is consistent with representations made in proposed rule changes for issues of Managed Fund Shares previously approved by the Commission.[52]

With respect to the proposed amendment to Rule 5735(b)(1)(C) relating to cash and cash equivalents, while there is no limitation on the amount of cash and cash equivalents that can make up the portfolio, such instruments are short-term, highly liquid, and of high credit quality, making them less susceptible than other asset classes both to price manipulation and volatility. Further, the requirement is consistent with representations made in proposed rule changes for issues of Managed Fund Shares previously approved by the Commission.[53]

With respect to proposed Rule 5735(b)(1)(D)(i) relating to listed derivatives, the Exchange believes that it is appropriate that there be no limit to the percentage of a portfolio invested in such holdings, provided that, in the aggregate, at least 90% of the weight of such holdings invested in futures, exchange-traded options, and listed swaps would consist of futures, options, and swaps for which the Exchange may obtain information via ISG from other members or affiliates or for which the principal market is a market with which the Exchange has a CSSA. Such a requirement would facilitate information sharing among market participants trading shares of a series of Managed Fund Shares as well as futures and options that such series may hold. In addition, listed swaps would be centrally cleared, reducing counterparty risk and thereby furthering investor protection.[54]

With respect to proposed Rule 5735(b)(1)(D)(ii), requiring percentage caps on the aggregate gross notional value of listed derivatives based on any five or fewer underlying reference assets or based on any single underlying reference asset, the Exchange believes such requirements will help ensure that listed derivatives utilized by a fund are adequately diversified and not unduly concentrated.

With respect to proposed Rule 5735(b)(1)(E) relating to OTC derivatives, the Exchange believes that the limitation to 20% of a fund's assets would assure that the preponderance of fund investments would not be in derivatives that are not listed and centrally cleared. The Exchange believes that such a limitation is sufficient to mitigate the risks associated with price manipulation because a 20% cap on OTC derivatives will ensure that any series of Managed Fund Shares will be sufficiently broad-based in scope to minimize potential manipulation associated with OTC derivatives and because the remaining 80% of the portfolio will consist of instruments subject to numerous restrictions designed to prevent manipulation, including equity securities (which, as proposed, would be subject to market cap, trading volume, and diversity requirements, among others), fixed income securities (which, as proposed, would be subject to principal amount outstanding, diversity, and issuer requirements, among others), cash and cash equivalents (which, as proposed, would be limited to short-term, highly liquid, and high credit quality instruments), and/or listed derivatives (which would be subject to the limitations in proposed Rule 5735(b)(1)(D)).

The Exchange notes that a fund's investments in derivative instruments would be subject to limits on leverage imposed by the 1940 Act. Section 18(f) of the 1940 Act and related Commission guidance limit the amount of leverage an investment company can obtain. A fund's investments would be consistent with its investment objective and would not be used to enhance leverage. To limit the potential risk associated with a fund's use of derivatives, a fund will segregate or "earmark" assets determined to be liquid by a fund in accordance with the 1940 Act (or, as permitted by applicable regulation, enter into certain offsetting positions) to cover its obligations under derivative instruments.

With respect to proposed Rule 5735(b)(1)(F) relating to a fund's use of listed or OTC derivatives to gain exposure to individual equities and/or fixed income securities, or to indexes of equities and/or indexes of fixed income securities, the Exchange notes that the aggregate gross notional value of such exposure would be required to meet the numerical and other criteria set forth in proposed Rules 5735(b)(1)(A) and 5735(b)(1)(B) (including gross notional exposures), respectively.

Quotation and other market information relating to listed futures and options is available from the exchanges listing such instruments as well as from market data vendors. With respect to centrally-cleared swaps[55] and non-centrally-cleared swaps regulated by the CFTC,[56] the Dodd-Frank Act mandates that swap information be reported to swap data repositories ("SDRs").[57] SDRs provide a central facility for swap data reporting and recordkeeping and are required to comply with data standards set by the CFTC, including real-time public reporting of swap transaction data to a derivatives clearing organization or SEF.[58] SDRs require real-time reporting of all OTC and centrally cleared derivatives, including public reporting of the swap price and size. The parties responsible for reporting swaps information are CFTC-registered swap dealers ("RSDs"), major swap participants, and swap execution facilities ("SEFs"). If swap counterparties do not fall into the above categories, then one of the parties to the swap must report the trade to the SDR. Cleared swaps regulated by the CFTC must be executed on a Designated Contract Market ("DCM") or SEF. Such cleared swaps have the same reporting requirements as futures, including end-of-day price, volume, and open interest. CFTC swaps reporting requirements require public dissemination of, among other items, product ID (if available); asset class; underlying reference asset, reference issuer, or reference index; termination date; date and time of execution; price, including currency; notional amounts, including currency; whether direct or indirect counterparties include an RSD; whether cleared or uncleared; and platform ID of where the contract was executed (if applicable).

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[52] *See* note 34 above.

[53] *See* note 35 above.

[54] The Commission has noted that "[c]entral clearing mitigates counterparty risk among dealers and other institutions by shifting that risk from individual counterparties to [central counterparties ("CCPs")], thereby protecting CCPs from each other's potential failures." *See* Securities Exchange Act Release No. 67286 (June 28, 2012) (File No. S7–44–10) (Process for Submissions for Review of Security-Based Swaps for Mandatory Clearing and Notice Filing Requirements for Clearing Agencies).

[55] There are currently five categories of swaps eligible for central clearing: Interest rate swaps; credit default swaps; foreign exchange swaps; equity swaps; and commodity swaps. The following entities provide central clearing for OTC derivatives: ICE Clear Credit (US); ICE Clear (EU); CME Group; LCH.Clearnet; and Eurex.

[56] Pursuant to the Dodd-Frank Act, OTC and centrally-cleared swaps are regulated by the CFTC with the exception of security-based swaps, which are regulated by the Commission.

[57] The following entities are provisionally registered with the CFTC as SDRs: BSDR LLC., Chicago Mercantile Exchange, Inc., DTCC Data Repository, and ICE Trade Vault.

[58] Approximately eighteen entities are currently registered with the CFTC as SEFs.

With respect to security-based swaps regulated by the Commission, the Commission has adopted Regulation SBSR under the Act implementing requirements for regulatory reporting and public dissemination of security-based swap transactions set forth in Title VII of the Dodd-Frank Act. Regulation SBSR provides for the reporting of security-based swap information to registered security-based swap data repositories ("Registered SDRs") or the Commission, and the public dissemination of security-based swap transaction, volume, and pricing information by Registered SDRs.[59]

Price information relating to forwards and OTC options will be available from major market data vendors.

A fund's investments will not be used to seek performance that is the multiple or inverse multiple (*i.e.,* 2Xs and 3Xs) of a fund's broad-based securities market index (as defined in Form N–1A).[60] In addition, the Exchange notes that, under proposed Rule 5735(b)(1)(A), for Exchange Traded Derivative Securities and Linked Securities, no more than 25% of the equity weight of a fund's portfolio could include leveraged and/or inverse leveraged Exchange Traded Derivative Securities or Linked Securities.

The proposed rule change is also designed to protect investors and the public interest because Managed Fund Shares listed and traded pursuant to Rule 5735, including pursuant to the proposed new portfolio standards, would continue to be subject to the full panoply of Exchange rules and procedures that currently govern the trading of equity securities on the Exchange.[61]

The proposed rule change is also designed to protect investors and the public interest as well as to promote just and equitable principles of trade in that any Non-U.S. Component Stocks will each meet the following criteria initially and on a continuing basis: (1) Have a minimum market value of at least $100 million; (2) have a minimum global monthly trading volume of 250,000 shares, or minimum global notional volume traded per month of $25,000,000, averaged over the last six months; (3) most heavily weighted Non-U.S. Component Stock shall not exceed 25% of the equity weight of the portfolio, and, to the extent applicable, the five most heavily weighted Non-U.S. Component Stocks shall not exceed 60% of the equity weight of the portfolio; and (4) each Non-U.S. Component Stock shall be listed and traded on an exchange that has last-sale reporting.

The Exchange believes that such quantitative criteria are sufficient to mitigate any concerns that may arise on the basis of a series of Managed Fund Shares potentially holding 100% of its assets in Non-U.S. Component Stocks that are neither listed on members of ISG nor exchanges with which the Exchange has in place a CSSA because, as stated above, such criteria are either the same or more stringent than the portfolio requirements for Index Fund Shares that hold Non-U.S. Component Stocks and there are no such requirements related to such securities being listed on an exchange that is a member of ISG or with which the Exchange has in place a CSSA.

Further, the Exchange has not encountered and is not aware of any instances of manipulation or other negative impact in any series of Index Fund Shares that has occurred by virtue of the Index Fund Shares holding such Non-U.S. Component Stocks. Therefore, the Exchange believes that there should be no difference in the portfolio requirements for Managed Fund Shares and Index Fund Shares as it relates to holding Non-U.S. Component Stocks that are not listed on an exchange that is a member of ISG or with which the Exchange has in place a CSSA.

The Exchange believes that the proposed rule change is designed to prevent fraudulent and manipulative acts and practices because the Managed Fund Shares will be listed and traded on the Exchange pursuant to the initial and continued listing criteria in Rule 5735. The Exchange has in place surveillance procedures that are adequate to properly monitor trading in the Managed Fund Shares in all trading sessions and to deter and detect violations of Exchange rules and applicable federal securities laws. FINRA, on behalf of the Exchange, or the regulatory staff of the Exchange, will communicate as needed regarding trading in Managed Fund Shares with other markets that are members of the ISG, including all U.S. securities exchanges and futures exchanges on which the components are traded.

In addition, the Exchange may obtain information regarding trading in Managed Fund Shares from other markets that are members of the ISG, including all U.S. securities exchanges and futures exchanges on which the components are traded, or with which the Exchange has in place a CSSA.

The Exchange also believes that the proposed rule change would fulfill the intended objective of Rule 19b–4(e) under the Act by allowing Managed Fund Shares that satisfy the proposed listing standards to be listed and traded without separate Commission approval. However, as proposed, the Exchange would continue to file separate proposed rule changes before the listing and trading of Managed Fund Shares that do not satisfy the additional criteria described above.

The Exchange, on a periodic basis and no less than annually, will review issues of Managed Fund Shares listed pursuant to Rule 5735(b)(1), and will provide a report to the Regulatory Oversight Committee of the Exchange's Board of Directors regarding the Exchange's findings. In addition, the Exchange will provide the Commission staff with a report each calendar quarter that includes the following information for issues of Managed Fund Shares listed during such calendar quarter under Rule 5735(b)(1): (1) Trading symbol and date of listing on the Exchange; (2) the number of active authorized participants and a description of any failure of an issue of Managed Fund Shares listed pursuant to Rule 5735(b)(1) or of an authorized participant to deliver shares, cash, or cash and financial instruments in connection with creation or redemption orders; and (3) a description of any failure of an issue of Managed Fund Shares to comply with Rule 5735.

Prior to listing pursuant to proposed amended Rule 5735(b)(1), an issuer would be required to represent to the Exchange that it will advise the Exchange of any failure by a series of

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[59] *See* Securities Exchange Act Release No. 74244 (February 11, 2015), 80 FR 14564 (March 19, 2015) (Regulation SBSR—Reporting and Dissemination of Security-Based Swap Information).

[60] *See, e.g.,* Securities Exchange Act Release No. 74842 (April 29, 2015), 86 FR 25723 (May 5, 2015) (SR–NYSEArca–2014–89) (order approving listing and trading of shares of eight PIMCO exchange-traded funds).

[61] *See* note 4 above, Approval Order, at 35177.

Managed Fund Shares to comply with the continued listing requirements, and, pursuant to its obligations under Section 19(g)(1) of the Act, the Exchange will monitor for compliance with the continued listing requirements. If the Fund is not in compliance with the applicable listing requirements, the Exchange will commence delisting procedures under the Nasdaq Rule 5800 Series.

For these reasons, the Exchange believes that the proposal is consistent with the Act.

B. Self-Regulatory Organization's Statement on Burden on Competition

In accordance with Section 6(b)(8) of the Act,[62] the Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. Instead, the Exchange believes that the proposed rule change would facilitate the listing and trading of additional types of Managed Fund Shares and result in a significantly more efficient process surrounding the listing and trading of Managed Fund Shares, which will enhance competition among market participants, to the benefit of investors and the marketplace. The Exchange believes that this would reduce the time frame for bringing Managed Fund Shares to market, thereby reducing the burdens on issuers and other market participants and promoting competition. In turn, the Exchange believes that the proposed change would make the process for listing Managed Fund Shares more competitive by applying uniform listing standards with respect to Managed Fund Shares.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the **Federal Register** or within such longer period up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Exchange consents, the Commission shall: (a) by order approve or disapprove such proposed rule change, or (b) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov*. Please include File Number SR–NASDAQ–2016–104 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–NASDAQ–2016–104. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NASDAQ–2016–104 and should be submitted on or before September 14, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[63]

Robert W. Errett,

Deputy Secretary.

[FR Doc. 2016–20210 Filed 8–23–16; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–78618; File No. SR–BOX–2016–41]

Self-Regulatory Organizations; BOX Options Exchange LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend the Fee Schedule on the BOX Market LLC ("BOX") Options Facility

August 18, 2016.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on August 15, 2016, BOX Options Exchange LLC (the "Exchange") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Exchange filed the proposed rule change pursuant to Section 19(b)(3)(A)(ii) of the Act,[3] and Rule 19b–4(f)(2) thereunder,[4] which renders the proposal effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of the Substance of the Proposed Rule Change

The Exchange is filing with the Securities and Exchange Commission ("Commission") a proposed rule change to amend the Fee Schedule to make a number of changes to the fees and credits for PIP and COPIP Transactions on the BOX Market LLC ("BOX") options facility. The text of the proposed rule change is available from the principal office of the Exchange, at the Commission's Public Reference Room and also on the Exchange's Internet Web site at *http://boxexchange.com*.

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[62] 15 U.S.C. 78f(b)(8).

[63] 17 CFR 200.30–3(a)(12).

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] 15 U.S.C. 78s(b)(3)(A)(ii).

[4] 17 CFR 240.19b–4(f)(2).

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend the Fee Schedule for trading on BOX to make a number of changes to the fees and credits for PIP and COPIP Transactions.[5] Overall, the Exchange proposes to amend the Fee Schedule to differentiate between those PIP and COPIP transactions where the PIP or COPIP Order is from the account of a Public Customer; and those PIP and COPIP transactions where a PIP or COPIP Order is from the account of a Professional Customer, Broker Dealer or Market Maker ("Non-Public Customer"). While most PIP and COPIP Orders are from the account of a Public Customer, any type of BOX Participant may submit a PIP or COPIP Order with a matching contra order equal to the full size of the PIP or COPIP Order to the PIP and COPIP auction mechanisms. Therefore, the Exchange believes this distinction is appropriate, as the current fees, rebates, and credits for PIP and COPIP transactions within the BOX Fee Schedule are meant to incentivize Public Customer order flow to the PIP and COPIP auctions. The Exchange believes that similar incentives are not necessary for Non-Public Customer PIP and COPIP order flow and the proposed fees and credits below are meant to establish separate fees and credits for Non-Public Customer PIP and COPIP Order flow which, taken as a whole, do not offer the same level of inducement. Further, the Exchange notes that the distinction between auction transactions from a Public Customer versus a Non-Public Customer is already in place on another options exchange.[6]

Exchange Fees

PIP and COPIP Orders

The Exchange proposes to adjust certain fees for PIP and COPIP Transactions. Currently, Professional Customers, Broker Dealers and Market Makers are assessed a fee of $0.15 for PIP and COPIP Orders[7] and Public Customers are assessed no fee. The Exchange proposes to reduce the fees assessed to Professional Customers, Broker Dealers and Market Makers for PIP and COPIP Orders in Penny and Non-Penny Pilot Classes to $0.05.

Primary Improvement Order

Under the Primary Improvement Order[8] tiered fee structure, the Exchange assesses a per contract execution fee to all Primary Improvement Order executions initiated by the particular Initiating Participant. Percentage thresholds are calculated on a monthly basis by totaling the Initiating Participant's Primary Improvement Order volume submitted to BOX, relative to the total national Customer volume in multiply-listed options classes.

The Exchange proposes to first add language that will specify that the tiered fee schedule for initiating participants will only apply to Primary Improvement Order executions where the corresponding PIP or COPIP Order is from the account of a Public Customer. The Exchange then proposes to introduce a flat per contract fee of $0.05 for all Primary Improvement Orders where the corresponding PIP or COPIP Order is from the account of a Non-Public Customer.

BOX Volume Rebate ("BVR")

The Exchange then proposes to amend Section I.B.2 of the Fee Schedule (BVR). Under the current BVR, the Exchange offers a tiered per contract rebate for all PIP Orders and COPIP orders of 100 contracts and under. Percentage thresholds are calculated on a monthly basis by totaling the Participant's PIP and COPIP volume submitted to BOX, relative to the total national Customer volume in multiply-listed options classes. The Exchange proposes to add language that will specify that only Public Customer PIP and COPIP Orders are eligible for the BVR.

Liquidity Fees and Credits

The Exchange then proposes to amend Section II.A. of the BOX Fee Schedule, Liquidity Fees and Credits for PIP and COPIP transactions. Specifically, the Exchange proposes to amend Section II.A. to differentiate between PIP and COPIP transactions where the PIP and COPIP Orders are from the accounts of Public Customers and PIP and COPIP transactions where the PIP and COPIP Orders are from the accounts of Non-Public Customers.

First, the Exchange proposes to specify that the current liquidity fees and credits will only apply to PIP and COPIP transactions where the PIP and COPIP Order is from the account of a Public Customer. The liquidity fees and credits for these PIP and COPIP Orders, the Primary Improvement Order and any corresponding Improvement Orders remain unchanged and will be as follows:

	Fee for adding liquidity	Credit for removing liquidity
Non-Penny Pilot Classes	$0.77	($0.77)
Penny Pilot Classes	$0.38	($0.38)

The Exchange then proposes to establish a new section for the Liquidity Fees and Credits of PIP and COPIP transactions where the PIP and COPIP Order is from the account of a Non-Public Customer. First, the Exchange proposes to specify that PIP or COPIP Orders from the account of a Non-Public Customer are assessed the "removal" credit only if the PIP or COPIP Order does not trade with its contra order (the Primary Improvement Order). The

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[5] Transactions executed through Price Improvement Period ("PIP") and the Complex Order Price Improvement Period ("COPIP") auction mechanisms. All COPIP transactions will be charged per contract per leg.

[6] *See* Miami International Securities Exchange LLC ("MIAX") Fee Schedule Section I(A)(v) available at *https://www.miaxoptions.com/content/fees.*

[7] A PIP Order or COPIP Order is a Customer Order (an agency order for the account of either a customer or a broker-dealer) designated for the PIP or COPIP, respectively.

[8] A Primary Improvement Order is the matching contra order submitted to the PIP or COPIP on the opposite side of the PIP or COPIP order.

Exchange also proposes to specify that only responses to PIP and COPIP Orders from the account of a Non-Public Customer that are executed in these mechanisms, also known as Improvement Orders, shall continue to be charged the "add" fee. Specifically, a PIP or COPIP Order from the account of a Non-Public Customer that does not trade with its Primary Improvement Order, and the corresponding Improvement Orders will subject to the fees and credits in the following table:

	Fee for adding liquidity	Credit for removing liquidity
Non-Penny Pilot Classes	$0.77	($0.77)
Penny Pilot Classes	$0.38	($0.38)

For example, if a Broker Dealer submits a PIP Order for the account of a Non-Public Customer to buy 100 contracts in the PIP and there are no responders, the PIP Order would execute against the matching Primary Improvement Order to sell 100 contracts and neither Order would be assessed a liquidity fee or credit. If, instead, the same PIP Order receives an Improvement Order response to sell 75 contracts, at the end of the auction the PIP Order would now execute against the Improvement Order for 75 contracts and the Primary Improvement Order for 25 contracts, and liquidity fees and credits would only be assessed on the 75 contracts which executed against the Improvement Order. Specifically, the 75 contracts from the PIP Order will receive the removal credit and the 75 contracts from the Improvement Order will be charged the add fee.

Lastly, the Exchange also proposes to update the footnote numbering and make other non-substantive technical changes within the BOX Fee Schedule.

2. Statutory Basis

The Exchange believes that the proposal is consistent with the requirements of Section 6(b) of the Act, in general, and Section 6(b)(4) and 6(b)(5)of the Act,[9] in particular, in that it provides for the equitable allocation of reasonable dues, fees, and other charges among BOX Participants and other persons using its facilities and does not unfairly discriminate between customers, issuers, brokers or dealers.

Exchange Fees

PIP and COPIP Transactions

The Exchange believes that reducing the fees assessed to Professional Customers, Broker Dealers and Market Makers for PIP and COPIP Orders in Penny and Non-Penny Pilot Classes is reasonable, equitable, and not unfairly discriminatory. In particular, the Exchange believes that reducing these fees will encourage auction order flow to the Exchange, which will benefit all market participants on the Exchange. BOX believes that the proposed fee reductions from $0.15 to $0.05 are reasonable and in line with similar fees on other exchanges.[10] Further, the Exchange believes the $0.05 fee is equitable and not unfairly discriminatory, as it applies equally to all Market Maker, Professional Customers and Broker Dealers submitting PIP and COPIP Orders to the PIP and COPIP auction mechanisms. The Exchange believes it is equitable and not unfairly discriminatory to charge these Non-Public Customers more for their PIP and COPIP Orders in Penny and Non-Penny Pilot Classes than Public Customers. The practice of incentivizing increased Public Customer order flow is common in the options markets.

Primary Improvement Order

The Exchange believes that adding language to specify that the tiered fee schedule for initiating participants will only apply to Primary Improvement Order executions where the corresponding PIP or COPIP Order is from the account of a Public Customer, as well as introducing a flat per contract fee of $0.05 for all Primary Improvement Orders where the corresponding PIP or COPIP Order is from the account of a Non-Public Customer is reasonable, equitable and not unfairly discriminatory. The Exchange also believes the proposed $0.05 fee for Primary Improvement Order executions where the corresponding PIP or COPIP Order is from the account of a Non-Public Customer is reasonable, as it is within the range of fees currently assessed on all Primary Improvement Orders on BOX.[11] The Exchange believes that this distinction is reasonable and competitive, as it is made on another options exchange.[12] Finally, the Exchange believes that differentiating between Public Customer and Non-Public Customer PIP and COPIP Orders, and their corresponding Primary Improvement Orders is equitable and not unfairly discriminatory. As stated above, the current fees, credit and rebates for PIP and COPIP transactions are meant to encourage Public Customer order flow to the PIP and COPIP auction mechanisms. Specifically, the tiered fee schedule for initiating participants encourages Order Flow Providers to submit Public Customer orders to the PIP or COPIP to gain the benefit of a lower fee. The Exchange believes that this incentive is not necessary for Non-Public Customer PIP and COPIP order flow and that the proposed flat $0.05 fee is appropriate. Specifically, when taken as a whole, the proposed Non-Public Customer PIP and COPIP transactions fees will result in the PIP or COPIP Order always being assessed a $0.05 fee with no rebate potential,[13] and the corresponding Primary Improvement Order being assessed a flat $0.05 fee. In comparison, the Initiating Participant's Primary Improvement Order for a Public Customer PIP or COPIP Order could potentially be assessed a fee as low as $0.02,[14] while the corresponding PIP or COPIP Order would be assessed no fee and could obtain a rebate of up $0.12 (PIP Orders) or $0.06 (COPIP Orders) depending on the Participant's volume.

BOX Volume Rebate

The Exchange believes the proposed changes to the BVR are reasonable, equitable and not unfairly discriminatory. The BVR was adopted to attract Public Customer order flow to the Exchange by offering these

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[9] 15 U.S.C. 78f(b)(4) and (5).

[10] *See* MIAX Fee Schedule Section I(A)(v); Phlx Pricing Schedule Section IV and ISE Fee Schedule Section I. Comparable fees at these exchanges range from $0.05 to $0.30.

[11] For Primary Improvement Order executions, contract fees range from $0.25 to $0.02.

[12] PHLX also distinguishes between a PIXL Order from the account of a Non-Customer as compared to a PIXL Order from the account of a Customer. *See* NASDAQ PHLX LLC ("Phlx") Fee Schedule Section V. When a PIXL Order is contra to a PIXL Auction Responder, a Customer PIXL Order will be assessed $0.00 per contract where a Non-Customer PIXL Order will be assessed $0.30 per contract in Penny Pilot Options or $0.38 in Non-Penny Pilot Options.

[13] These transactions will be exempt from the BVR.

[14] The Exchange notes that a majority of Primary Improvement Order executions are assessed Tier 4 and 5 fees within the tiered fee schedule for Initiating Participants.

Participants incentives to submit their PIP and COPIP Orders to the Exchange.[15] As such, the Exchange believes it is reasonable and appropriate to exempt Non-Public Customer PIP and COPIP Orders from the BVR. Further, the Exchange believes this exemption is equitable and not unfairly discriminatory as it will apply to all Non-Public Customers uniformly. As stated above, providing specific incentives for Public Customer volume is common both within the options industry and elsewhere in the BOX Fee Schedule.

Liquidity Fees and Credits

The Exchange believes amending the Liquidity Fees and Credits for PIP and COPIP transactions to differentiate between PIP and COPIP transactions where the PIP or COPIP Order is from the account of a Public Customer, and the PIP or COPIP Order is from the account of a Non-Public Customer is reasonable, equitable and not unfairly discriminatory. As stated above, the current liquidity fees and credits for PIP and COPIP transactions are focused on incentivizing Public Customer order flow to the PIP and COPIP auctions. Therefore, the Exchange believes it is equitable and not unfairly discriminatory to establish different fees and credits for Non-Public Customer order flow to these auction mechanisms. The Exchange notes that the liquidity fees and credits for PIP and COPIP transactions where the PIP and COPIP Order is from the account of a Public Customer remain unchanged.

Accordingly, the Exchange believes the proposed liquidity fees and credits for PIP and COPIP transactions where the PIP or COPIP Order are from the account of a Non-Public Customer are reasonable, equitable and not unfairly discriminatory as they are identical to the current liquidity fees and credits assessed for PIP and COPIP transactions where the PIP or COPIP Order is from the account of a Public Customer.

The Exchange also believes it is reasonable, equitable and not unfairly discriminatory to only apply the liquidity fees and credits to the portion of the PIP or COPIP Order from the account of a Non-Public Customer that does not trade with its contra order, and the Improvement Order responses. Liquidity fees and credits on BOX do not directly result in revenue to BOX, but are meant to incentivize Participants to attract order flow. Because of the value of Public Customer order flow, the Exchange believes these incentives are appropriate even if the Public Customer PIP or COPIP Order is fully internalized and trades only against its matching Primary Improvement Order. However, as stated above, the Exchange believes that the same level of incentives is not necessary for Non-Public Customer PIP or COPIP order flow. Therefore, the Exchange believes it reasonable to only provide these incentives to the portion of the Non-Public Customer PIP or COPIP Orders where liquidity is being added in the form of Improvement Order responses. Further, the Exchanges notes that the liquidity fees and credits for transactions within the Facilitation and Solicitation auction mechanism (Section II.B. of the BOX Fee Schedule) are assessed in a similar manner, and that the distinction is also made within the price improvement mechanism fees and rebates on another exchange in the options industry.[16]

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act.

The Exchange believes that the proposed adjustments to the Non-Public Customer PIP and COPIP Transactions fees will not impose a burden on competition among various Exchange Participants. Rather, BOX believes that the changes will result in the Participants being charged appropriately for their Non-Public Customer PIP and COPIP Transactions and is designed to enhance competition in Auction transactions on BOX. Submitting an order is entirely voluntary and Participants can determine which type of order they wish to submit, if any, to the Exchange.

The Exchange also believes that amending the proposed liquidity fees and credits for Non-Public Customer PIP and COPIP Transactions will not impose a burden on competition among various Exchange Participants. The Exchange believes that the proposed changes will result these Participants being charged or credited appropriately for these transactions.

Finally, the Exchange notes that it operates in a highly competitive market in which market participants can readily favor competing exchanges. In such an environment, the Exchange must continually review, and consider adjusting, its fees and credits to remain competitive with other exchanges. For the reasons described above, the Exchange believes that the proposed rule change reflects this competitive environment.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(ii) of the Exchange Act[17] and Rule 19b–4(f)(2) thereunder,[18] because it establishes or changes a due, or fee.

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend the rule change if it appears to the Commission that the action is necessary or appropriate in the public interest, for the protection of investors, or would otherwise further the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–BOX–2016–41 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–BOX–2016–41. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–BOX–2016–41, and should be submitted on or before September 14, 2016.

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[15] *See* Securities Exchange Release No. 73547 (November 6, 2014), 79 FR 67520 (November 13, 2014) (SR–BOX–2014–25).

[16] Under Section I of the ISE Fee Schedule, the initiator receives a $0.35 "break-up" rebate only for contracts that are submitted to the PIM that do not trade with their contra order. The responder fee for these Orders is only applied to any contracts for which the rebate is provided.

[17] 15 U.S.C. 78s(b)(3)(A)(ii).

[18] 17 CFR 240.19b–4(f)(2).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[19]

Robert W. Errett,

Deputy Secretary.

[FR Doc. 2016–20212 Filed 8–23–16; 8:45 am]

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[19] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–78614; File No. SR–NYSEArca–2016–64]

Self-Regulatory Organizations; NYSE Arca, Inc.; Order Instituting Proceedings To Determine Whether To Approve or Disapprove Proposed Rule Change, as Modified by Amendment Nos. 1 and 2, To List and Trade Shares of the AdvisorShares KIM Korea Equity ETF

August 18, 2016.

On May 2, 2016, NYSE Arca, Inc. ("Exchange") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")[1] and Rule 19b–4 thereunder,[2] a proposed rule change to list and trade shares ("Shares") of the AdvisorShares KIM Korea Equity ETF ("Fund") under NYSE Arca Equities Rule 8.600. On May 13, 2016, the Exchange submitted Amendment No. 1 to the proposed rule change.[3] The Commission published notice of the proposed rule change, as modified by Amendment No. 1, in the **Federal Register** on May 23, 2016.[4] On May 23, 2016, the Exchange submitted Amendment No. 2 to the proposed rule change.[5] On July 7, 2016, pursuant to Section 19(b)(2) of the Act,[6] the Commission designated a longer period within which to approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to disapprove the proposed rule change.[7] The Commission received no comments on the proposed rule change. This order institutes proceedings under Section 19(b)(2)(B) of the Act[8] to determine whether to approve or disapprove the proposed rule change, as modified by Amendment Nos. 1 and 2.

I. The Exchange's Description of the Proposal[9]

The Exchange proposes to list and trade the Shares under NYSE Arca Equities Rule 8.600, which governs the listing and trading of Managed Fund Shares on the Exchange. The Shares will be offered by AdvisorShares Trust ("Trust"), an open-end management investment company.[10] The investment adviser to the Fund will be AdvisorShares Investments LLC ("Adviser") and Korea Investment Management Co., Ltd. will be the Fund's sub-adviser ("Sub-Adviser"). Foreside Fund Services, LLC will be the principal underwriter and distributor of the Fund's Shares, and the Bank of New York Mellon will serve as the administrator, custodian, and transfer agent for the Fund.

The Fund's Principal Investments

The Exchange states that the investment objective of the Fund will be to seek to provide long-term capital appreciation above the capital appreciation of its primary benchmark, the MSCI Korea Index, and other Korea-focused indexes. The Fund will seek to achieve its investment objective by investing primarily in growth-oriented stocks of any capitalization range listed on the Korea Exchange. Under normal circumstances,[11] the Fund will invest at least 80% of its net assets (plus any borrowings for investment purposes) in equity securities listed on the Korea Exchange.[12]

The Exchange states that the Sub-Adviser will manage the Fund's portfolio by buying and holding stocks of companies at attractive valuation that it believes have growth potential. The Sub-Adviser will focus on corporate fundamental research in its stock selection, often called "bottom up" analysis. The Sub-Adviser will invest the Fund's assets with a mid- to long-term view, typically seeking to avoid short-term trading. In selecting investments for the Fund's portfolio, the Sub-Adviser will place emphasis on fundamentals rather than on short-term momentum and continuously monitor market risks. In deciding whether to sell investments in the Fund's portfolio, the Sub-Adviser will consider the following factors: A company's stock price reaches its target price; a company in the portfolio experiences negative fundamental changes; errors are found in the previous assumptions or forecasts of a company; and more profitable alternatives are found.

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[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] Amendment No. 1 replaced and superseded the original filing in its entirety. Amendment No. 1 is available at *https://www.sec.gov/comments/sr-nysearca-2016-64/nysearca201664-1.pdf.*

[4] *See* Securities Exchange Act Release No. 34–77847 (May 17, 2016), 81 FR 32364 (NYSEArca–2016–64) ("Notice").

[5] In Amendment No. 2, which replaced and superseded the original filing in its entirety, the Exchange clarified certain statements relating to the Fund's investments in Depositary Receipts and certain representations by the Exchange relating to surveillance. Amendment No. 2 is available at *https://www.sec.gov/comments/sr-nysearca-2016-64/nysearca201664-2.pdf.* Because Amendment No. 2 does not materially alter the substance of the proposed rule change or raise unique or novel regulatory issues, Amendment No. 2 is not subject to notice and comment.

[6] 15 U.S.C. 78s(b)(2).

[7] *See* Securities Exchange Act Release No. 78240, 81 FR 45332 (July 13, 2016). The Commission designated August 21, 2016, as the date by which the Commission would either approve or disapprove, or institute proceedings to determine whether to disapprove, the proposed rule change.

[8] 15 U.S.C. 78s(b)(2)(B).

[9] Additional information regarding the Fund, the Shares, and the Trust (as defined herein), including investment strategies, risks, creation and redemption procedures, fees, portfolio holdings, disclosure policies, calculation of net asset value, distributions, and taxes, among other things, can be found in the Notice and the Registration Statement, as applicable. *See* Notice, *supra* note 4, and Registration Statement, *infra* note 10.

[10] The Exchange states that the Trust is registered under the Investment Company Act of 1940 ("1940 Act") and that on March 25, 2016, the Trust filed with the Commission amendments to its registration statement on Form N–1A under the Securities Act of 1933 ("Securities Act") and under the 1940 Act relating to the Fund (File Nos. 333–157876 and 811–22110) ("Registration Statement"). In addition, the Exchange states that the Commission has issued an order granting certain exemptive relief to the Trust under the 1940 Act. *See* Investment Company Act Release No. 29291(May 28, 2010) (File No. 812–13677).

[11] The Exchange states that the term "under normal circumstances" means, without limitation, the absence of extreme volatility or trading halts in the equity markets or the financial markets generally; operational issues causing dissemination of inaccurate market information; or force majeure type events such as systems failure, natural or man-made disaster, act of God, armed conflict, act of terrorism, riot or labor disruption or any similar intervening circumstance.

[12] The Korea Exchange is a member of the Intermarket Surveillance Group ("ISG").

In addition to individual stock selection, the Exchange states that the Sub-Adviser will engage in sector allocation based on analysis of the macro economy and its effect on corporate competitiveness and industry cycles. This is often called "top down" analysis. The Sub-Adviser will strive to invest with large economic cycles as compared to short-term market trends and short-term supply and demand.

The Fund's Non-Principal Investments

The Exchange represents that while the Fund, under normal circumstances, will invest at least 80% of its assets in the securities described above in the "Principal Investments of the Fund," the Fund may invest its remaining assets in the securities and financial instruments as described below.

The Fund may invest in the following equity securities traded on a U.S. or foreign exchange or over-the-counter, including equity securities of foreign issuers in emerging countries: Common stocks, preferred stocks, warrants, rights, securities convertible into common stock, and investments in master limited partnerships.

The Fund may invest in issuers located outside the United States directly and may invest in exchange-traded funds ("ETFs"),[13] exchange-traded notes ("ETNs"),[14] and exchange-traded products ("ETPs")[15] that are indirectly linked to the performance of foreign issuers. The Fund may invest in "Depositary Receipts," consisting of American Depositary Receipts ("ADRs"), Global Depositary Receipts, European Depositary Receipts, International Depositary Receipts, "ordinary shares," and "New York shares" issued and traded in the U.S.[16]

The Fund may invest in non-exchange-traded investment company securities to the extent that such investments would be consistent with the requirements of Section 12(d)(1) of the 1940 Act or any rule, regulation, or order of the Commission or interpretation thereof. Consistent with the restrictions discussed above, the Fund may invest in U.S. and non-U.S. exchange-listed closed-end funds and business development companies. Except with respect to inverse ETFs as described above,[17] the Fund will not invest in inverse, leveraged, or inverse leveraged investment company securities.

The Fund may invest in U.S. government securities and may invest in certain U.S. government securities that are issued or guaranteed by agencies or instrumentalities of the U.S. government.[18] The Fund also may invest in non-exchange-traded convertible securities that are bonds, debentures, notes, or other securities that may be converted or exchanged (by the holder or by the issuer) into shares of the underlying common stock (or cash or securities of equivalent value) at a stated exchange ratio. Finally, the Fund may invest in shares of U.S. or non-U.S. exchange-traded real estate investment trusts and repurchase agreements and reverse repurchase agreements.[19]

The Fund's Investment Restrictions

The Exchange represents that the Fund may hold up to an aggregate amount of 15% of its net assets in assets deemed illiquid by the Adviser.[20] The Fund will monitor its portfolio liquidity on an ongoing basis to determine whether, in light of current circumstances, an adequate level of liquidity is being maintained, and will consider taking appropriate steps in order to maintain adequate liquidity if, through a change in values, net assets, or other circumstances, more than 15% of the Fund's net assets are held in illiquid assets.[21]

The Exchange also represents that the Fund will not invest in options, futures, swaps, or forward contracts. Further, the Fund's investments will be consistent with its investment objective and will not be used to provide multiple returns of a benchmark or to produce leveraged returns. Finally, the Exchange represents that not more than 10% of the net assets of the Fund in the aggregate invested in equity securities (other than non-exchange-traded investment company securities) shall consist of equity securities whose principal market is not a member of the ISG or is a market with which the Exchange does not have a comprehensive surveillance sharing agreement.

II. Proceedings To Determine Whether To Approve or Disapprove SR–NYSEArca–2016–64 and Grounds for Disapproval Under Consideration

The Commission is instituting proceedings pursuant to Section 19(b)(2)(B) of the Act[22] to determine whether the proposed rule change, as modified by Amendment Nos. 1 and 2, should be approved or disapproved. Institution of such proceedings is appropriate at this time in view of the legal and policy issues raised by the proposed rule change, as modified by Amendment Nos. 1 and 2. Institution of proceedings does not indicate that the Commission has reached any conclusions with respect to any of the issues involved. Rather, as described below, the Commission seeks and encourages interested persons to provide comments on the proposed rule change, as modified by Amendment Nos. 1 and 2.

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[13] For purposes of the proposed rule change, ETFs are Investment Company Units (as described in NYSE Arca Equities Rule 5.2(j)(3)); Portfolio Depositary Receipts (as described in NYSE Arca Equities Rule 8.100); and Managed Fund Shares (as described in NYSE Arca Equities Rule 8.600). The ETFs that the Fund invests in all will be listed and traded in the U.S. on registered exchanges. The Fund will invest in the securities of ETFs registered under the 1940 Act consistent with the requirements of Section 12(d)(1) of the 1940 Act, or any rule, regulation or order of the Commission or interpretation thereof. The Fund will only make ETF investments in conformity with the requirements of Regulation M of the Internal Revenue Code of 1986, as amended. While the Fund may invest in inverse ETFs, the Fund will not invest in leveraged or inverse leveraged ETFs (*e.g.,* 2X or 3X).

[14] For purposes of the proposed rule change, ETNs include Index-Linked Securities (as described in NYSE Arca Equities Rule5.2(j)(6)). While the Fund may invest in inverse ETNs, the Fund will not invest in leveraged or inverse leveraged ETNs (*e.g.,* 2X or 3X).

[15] For purposes of the proposed rule change, ETPs include Trust Issued Receipts (as described in NYSE Arca Equities Rule 8.200) and Currency Trust Shares (as described in NYSE Arca Equities Rule 8.202). While the Fund may invest in inverse ETPs, the Fund will not invest in leveraged or inverse leveraged ETPs (*e.g.,* 2X or 3X).

[16] The Exchange represents that not more than 10% of the Fund's assets will be invested in non-exchange-traded ADRs. In addition, the Exchange represents that other Depositary Receipts in which the Fund invests will be exchange-traded.

[17] *See* note 13, *supra.*

[18] According to the Exchange, securities issued or guaranteed by the U.S. government or its agencies or instrumentalities include the following: U.S. Treasury securities, which are backed by the full faith and credit of the U.S. Treasury and which differ only in their interest rates, maturities, and times of issuance; U.S. Treasury bills, which have initial maturities of one year or less; U.S. Treasury notes, which have initial maturities of one to ten years; U.S. Treasury bonds, which generally have initial maturities of greater than ten years; and U.S. Treasury zero-coupon bonds.

[19] The Fund may purchase securities on a when-issued, delayed-delivery or forward commitment basis (*i.e.,* delivery and payment can take place between a month and 120 days after the date of the transaction).

[20] The Exchange states that, under the supervision of the Fund's Board of Trustees, the Adviser determines the liquidity of the Fund's investments. In determining the liquidity of the Fund's investments, the Adviser may consider various factors, including (1) the frequency and volume of trades and quotations; (2) the number of dealers and prospective purchasers in the marketplace; (3) dealer undertakings to make a market; and (4) the nature of the security and the market in which it trades (including any demand, put or tender features, the mechanics and other requirements for transfer, any letters of credit or other credit enhancement features, any ratings, the number of holders, the method of soliciting offers, the time required to dispose of the security, and the ability to assign or offset the rights and obligations of the security).

[21] Illiquid assets include securities subject to contractual or other restrictions on resale and other instruments that lack readily available markets as determined in accordance with Commission staff guidance.

[22] 15 U.S.C. 78s(b)(2)(B).

Pursuant to Section 19(b)(2)(B) of the Act,[23] the Commission is providing notice of the grounds for disapproval under consideration. The Commission is instituting proceedings to allow for the submission of additional analysis regarding the proposed rule change's consistency with Section 6(b)(5) of the Act, which requires, among other things, that the rules of a national securities exchange be "designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade," and "to protect investors and the public interest."[24]

The Exchange provides that the Fund will invest at least 80% of its net assets in equity securities listed on the Korea Exchange. The Exchange, however, proposes no other quantitative standards with respect to the types of equity securities listed on the Korea Exchange in which the Fund, at the Sub-Adviser's discretion, may invest. The Commission has recently noted that appropriate quantitative standards, such as minimum market value and trading volume requirements, "should reduce the extent to which Managed Fund Shares holding Non-U.S. Component Stocks may be susceptible to manipulation."[25] Accordingly, the Commission seeks comment on whether the Exchange's representations relating to the Korean equity securities held by the Fund are sufficient to prevent the susceptibility of the Fund's portfolio to manipulation and are thereby consistent with the requirements of Section 6(b)(5) of the Act, which, among other things, requires that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices and to protect investors and the public interest.

III. Procedure: Request for Written Comments

The Commission requests that interested persons provide written submissions of their views, data, and arguments with respect to the issues identified above, as well as any other concerns they may have with the proposal. In particular, the Commission invites the written views of interested persons concerning whether the proposal is consistent with Section 6(b)(5) or any other provision of the Act, or the rules and regulations thereunder. Although there do not appear to be any issues relevant to approval or disapproval that would be facilitated by an oral presentation of views, data, and arguments, the Commission will consider, pursuant to Rule 19b–4, any request for an opportunity to make an oral presentation.[26]

Interested persons are invited to submit written data, views, and arguments regarding whether the proposal should be approved or disapproved by September 14, 2016. Any person who wishes to file a rebuttal to any other person's submission must file that rebuttal by September 28, 2016. The Commission asks that commenters address the sufficiency of the Exchange's statements in support of the proposal, which are set forth in the Notice[27] and in Amendment No. 2 to the proposed rule change,[28] in addition to any other comments they may wish to submit about the proposed rule change, as modified by Amendment Nos. 1 and 2.

Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov*. Please include File Number SR–NYSEArca–2016–64 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Numbers SR–NYSEArca–2016–64. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of these filings also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NYSEArca–2016–64 and should be submitted on or before September 14, 2016. Rebuttal comments should be submitted by September 28, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[29]

Robert W. Errett,

Deputy Secretary.

[FR Doc. 2016–20208 Filed 8–23–16; 8:45 am]

BILLING CODE 8011–01–P

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[23] *Id.*

[24] 15 U.S.C. 78f(b)(5).

[25] *See* Securities Exchange Act Release No. 78397 (July 22, 2016), 81 FR 49320, at 49325 (July 27, 2016). The term "Non-U.S. Component Stocks" is defined in NYSE Arca Equities Rule 5.2(j)(3) as an equity security that is not registered under Sections 12(b) or 12(g) of the Act and that is issued by an entity that (a) is not organized, domiciled, or incorporated in the United States, and (b) is an operating company (including Real Estate Investment Trusts and income trusts, but excluding investment trusts, unit trusts, mutual funds, and derivatives). *See* NYSE Arca Equities Rule 5.2(j)(3).

[26] Section 19(b)(2) of the Act, as amended by the Securities Act Amendments of 1975, Public Law 94–29 (June 4, 1975), grants the Commission flexibility to determine what type of proceeding—either oral or notice and opportunity for written comments—is appropriate for consideration of a particular proposal by a self-regulatory organization. *See* Securities Act Amendments of 1975, Senate Comm. on Banking, Housing & Urban Affairs, S. Rep. No. 75, 94th Cong., 1st Sess. 30 (1975).

[27] *Supra* note 4.

[28] *Supra* note 5.

[29] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–78612; File No. SR–MIAX–2016–29]

Self-Regulatory Organizations; Miami International Securities Exchange LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Exchange Rules 803 and 1308

August 18, 2016.

Pursuant to the provisions of Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on August 12, 2016, Miami International Securities Exchange LLC ("MIAX" or "Exchange") filed with the Securities and Exchange Commission ("Commission") a proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange is filing a proposal to amend Exchange Rule 803, Audits; and Exchange Rule 1308, Supervision of Accounts, to adopt new Interpretations and Policies .01 to each existing rule regarding the submission of annual reports.

The text of the proposed rule change is available on the Exchange's Web site at *http://www.miaxoptions.com/filter/wotitle/rule_filing,* at MIAX's principal office, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend Exchange Rule 803, Audits, to adopt new Interpretations and Policies .01 to state that Members must now file annual reports electronically with the Exchange by utilizing the system or software prescribed by the Exchange which will be announced via Regulatory Circular. Additionally, the Exchange proposes to amend Exchange Rule 1308, Supervision of Accounts, to adopt new Interpretations and Policies .01 to state that Members required to file an annual report under paragraph (g) of Rule 1308 must now file such report electronically with the Exchange by utilizing the system or software prescribed by the Exchange which will be announced via Regulatory Circular.

The Exchange has a Regulatory Services Agreement ("RSA") with the Financial Industry Regulatory Authority, Inc. ("FINRA"). FINRA provides its members, and the members of exchanges for which it provides regulatory services, access to its Firm Gateway system, which is a portal that provides consolidated access to various FINRA regulatory systems. As part of the RSA, FINRA will collect reports on behalf of the Exchange and provide a report to the Exchange indicating which Firms have submitted an annual audit report. Additionally, FINRA has a process in place to provide specific annual audit reports to the Exchange upon request.

The FINRA Firm Gateway is available to Members[3] of the Exchange for the submission of various regulatory filings, including certain filings such as the Annual Supervision Report and the Annual Audit Report. The Exchange intends to require Members that are required to submit these reports to the Exchange to submit them to FINRA through the Firm Gateway system and announce this to Members via Regulatory Circular as stated in the proposed amended rules.

Therefore the Exchange proposes to adopt Interpretations and Policies .01 to Rule 803 to state that reports must be filed electronically with the Exchange utilizing the system or software prescribed by the Exchange. Additionally, the Exchange proposes to adopt Interpretations and Policies .01 to Rule 1308 to state that if a Member is required to file a report, that such report must be filed electronically with the Exchange utilizing the system or software prescribed by the Exchange.

The Exchange believes that requiring Members to submit annual reports directly into the system of the Exchange's regulatory services provider will provide for a more efficient and effective process for the collection, tracking, consolidation, and review of Members' annual reports.

2. Statutory Basis

MIAX believes that its proposed rule change is consistent with Section 6(b) of the Act[4] in general, and furthers the objectives of Section 6(b)(5) of the Act[5] in particular, in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, to remove impediments to and perfect the mechanisms of a free and open market and a national market system and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[6] requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

In particular, the Exchange believes that the proposed rule change will create a more efficient and effective process for the Exchange's Members to submit annual reports to the Exchange, which fosters cooperation and coordination with FINRA in its performance of regulatory services with respect to the Exchange and Exchange Members. By enhancing the process through which the Exchange (through its regulatory services provider) receives annual reports, the Exchange believes the proposed rule changes will promote just and equitable principles of trade and ultimately protect investors. Additionally, upon implementation, all Members that are required to submit annual reports will be required to submit them in the same (and thus nondiscriminatory) electronic manner.

Regulation of Members continues to be performed by electronic processes, and thus the Exchange believes it is appropriate to require electronic submission of these reports so that they may be incorporated into these processes. By maintaining the flexibility within the rules for the Exchange to prescribe by Regulatory Circular which system or software will be used for the submission of annual reports, the Exchange believes it will be able to adjust, as necessary, the required manner of reporting by Members, particularly to the extent that new or enhanced software or systems are developed for this purpose.

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[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] The term "Member" means an individual organization approved to exercise trading rights associated with a Trading Permit. Members are deemed "members" under the Exchange Act. *See* Exchange Rule 100.

[4] 15 U.S.C. 78f(b).

[5] 15 U.S.C. 78f(b)(5).

[6] *Id.*

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The proposed rule change requires all Members that are required to submit annual reports to submit those reports electronically in the same manner.

The Exchange believes the proposed rule change will not impose any burden on intra-market competition because it applies equally to all Exchange Members with reporting obligations.

The Exchange does not believe that the proposed rule changes will impose any burden on intermarket competition as the proposed rule change is for regulatory purposes to enhance the process for Member's submission and the Exchange's collection, tracking, consolidation, and review of annual reports.

The Exchange believes that the proposed change is not controversial and does not impose any significant burden on the Exchange's Members. All Exchange Members have access to the FINRA Firm Gateway system and there is no additional financial cost to file the required reports electronically through this system. Additionally, the majority of Members of the Exchange are also Members of FINRA and use the FINRA Firm Gateway system on a regular basis. Therefore, the Exchange believes that any burden that the proposed rule change may impose on Members will be minimal. The Exchange believes any burden is outweighed by the benefits of electronic filing, which include a more efficient and effective process for the Exchange (through its regulatory services provider) to collect, track, and consolidate annual reports. The Exchange believes that an electronic filing process is in its, and its Members', best interest.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days after the date of the filing, or such shorter time as the Commission may designate, it has become effective pursuant to 19(b)(3)(A) of the Act[7] and Rule 19b–4(f)(6)[8] thereunder.

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov*. Please include File Number SR–MIAX–2016–29 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–MIAX–2016–29. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–MIAX–2016–29, and should be submitted on or before September 14, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[9]

Robert W. Errett,

Deputy Secretary.

[FR Doc. 2016–20206 Filed 8–23–16; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

Proposed Collection; Comment Request

Upon Written Request, Copies Available From: Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE., Washington, DC 20549–2736.

Extension:

Rule 17a–4, SEC File No. 270–198, OMB Control No. 3235–0279.

Notice is hereby given that pursuant to the Paperwork Reduction Act of 1995 ("PRA") (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission ("Commission") is soliciting comments on the collection of information provided for in Rule 17a–4 (17 CFR 240.17a–4), under the Securities Exchange Act of 1934 (15 U.S.C. 78a *et seq.*). The Commission plans to submit this existing collection of information to the Office of Management and Budget ("OMB") for extension and approval.

Rule 17a–4 requires exchange members, brokers and dealers ("broker-dealers”) to preserve for prescribed periods of time certain records required to be made by Rule 17a–3. In addition, Rule 17a–4 requires the preservation of records required to be made by other Commission rules and other kinds of records which firms make or receive in the ordinary course of business. These include, but are not limited to, bank statements, cancelled checks, bills receivable and payable, originals of communications, and descriptions of various transactions. Rule 17a–4 also permits broker-dealers to employ, under certain conditions, electronic storage media to maintain records required to be maintained under Rules 17a–3 and 17a–4.

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[7] 15 U.S.C. 78s(b)(3)(A).

[8] 17 CFR 240.19b–4(f)(6). In addition, Rule 19b–4(f)(6) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

[9] 17 CFR 200.30–3(a)(12).

There are approximately 4,104 active, registered broker-dealers. The staff estimates that the average amount of time necessary to preserve the books and records as required by Rule 17a–4 is 254 hours per broker-dealer per year. In addition, the Commission is moving into this information collection the annual burden hours for paragraph (b)(11) of Rule 17a–4, which requires any broker-dealer that sponsors an internal broker-dealer system to maintain certain records relating to such system for at least three years. The Commission estimates that paragraph (b)(11) of Rule 17a–4 imposes an annual burden of 3 hours per year to maintain the requisite records. The Commission estimates that there are approximately 150 internal broker-dealer systems, resulting in an annual recordkeeping burden of 450 hours. Therefore, the Commission estimates that compliance with Rule 17a–4 requires 1,042,866 hours each year ((4,104 broker-dealers × 254 hours) + (150 broker-dealers × 3 hours). These burdens are recordkeeping burdens.

The staff believes that compliance personnel would be charged with ensuring compliance with Commission regulation, including Rule 17a–4. The staff estimates that the hourly salary of a Compliance Clerk is $65 per hour.[1] Based upon these numbers, the total internal cost of compliance for 4,104 respondents is the dollar cost of approximately $67.8 million (1,042,416 yearly hours × $65). The total burden hour decrease of 242,062 is due to a decrease in the number of respondents from 5,057 to 4,104.

Based on conversations with members of the securities industry and the Commission's experience in the area, the staff estimates that the average broker-dealer spends approximately $5,000 each year to store documents required to be retained under Rule 17a–4. Costs include the cost of physical space, computer hardware and software, etc., which vary widely depending on the size of the broker-dealer and the type of storage media employed. The Commission estimates that the annual reporting and recordkeeping cost burden is $20,520,000. This cost is calculated by the number of active, registered broker-dealers multiplied by the reporting and recordkeeping cost for each respondent (4,104 active, registered broker-dealers × $5,000).

Written comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's estimate of the burden of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology. Consideration will be given to comments and suggestions submitted in writing within 60 days of this publication.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information under the PRA unless it displays a currently valid OMB control number.

Please direct your written comments to: Pamela Dyson, Director/Chief Information Officer, Securities and Exchange Commission, c/o Remi Pavlik-Simon, 100 F Street NE., Washington, DC 20549, or send an email to: *PRA_Mailbox@sec.gov.*

Dated: August 19, 2016.

Brent J. Fields,

Secretary.

[FR Doc. 2016–20258 Filed 8–23–16; 8:45 am]

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[1] This figure is based on SIFMA's *Office Salaries in the Securities Industry 2016,* modified by Commission staff to account for an 1,800-hour work-year multiplied by 2.93 to account for bonuses, firm size, employee benefits, and overhead.

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–78615; File No. SR–NYSEArca–2016–117]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend NYSE Arca Equities Rules 7.35P, 7.34P, 7.18P and 7.31P Regarding Order Processing Following an Auction or When Transitioning From One Trading Session to Another

August 18, 2016.

Pursuant to Section 19(b)(1)[1] of the Securities Exchange Act of 1934 (the “Act”),[2] and Rule 19b–4 thereunder,[3] notice is hereby given that on August 15, 2016, NYSE Arca, Inc. (the “Exchange” or “NYSE Arca”) filed with the Securities and Exchange Commission (the “Commission”) the proposed rule change as described in Items I and II below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend NYSE Arca Equities Rule 7.35P (Auctions), Rule 7.34P (Trading Sessions), Rule 7.18P (Halts), and 7.31P (Orders and Modifiers) regarding order processing following an auction or when transitioning from one trading sessions to another. The proposed rule change is available on the Exchange's Web site at *www.nyse.com,* at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of those statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant parts of such statements.

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[1] 15 U.S.C. 78s(b)(1).

[2] 15 U.S.C. 78a.

[3] 17 CFR 240.19b–4.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend NYSE Arca Equities Rule 7.35P (Auctions) ("Rule 7.35P"), Rule 7.34P (Trading Sessions) ("Rule 7.34P"), Rule 7.18P (Halts) ("Rule 7.18P"), and 7.31P (Orders and Modifiers) ("Rule 7.31P") regarding order processing following an auction or when transitioning from one trading session to another. These proposed changes would revise how the Exchange processes orders on the Pillar trading platform only.

Overview

Currently, under Rule 7.35P(g), during the Auction Processing Period,[4] new orders, requests to cancel, and requests to cancel and replace an order that are received during the Auction Processing Period will be accepted but will not be processed until after the applicable auction concludes. In addition, a request to cancel and replace an order that was entered during the Auction Processing Period for an order that was also entered during the Auction Processing Period will be rejected.

When the Exchange transitions to continuous trading, either after auction processing concludes or when transitioning from one trading session to another, the Exchange transitions to continuous trading pursuant to the steps specified in Rule 7.35P(h). Specifically, the Exchange will first expire orders that are no longer eligible to trade. Next, orders that are designated for a trading session and that were received during a prior trading session or during the Auction Processing Period, and that did not participate in the auction, will become eligible to trade. Then, before continuous trading will begin, the Exchange will process any order instructions received either during the Auction Imbalance Freeze or Auction Processing Period, which includes new orders and requests to cancel, will next adjust the display price and working price of orders based on the PBBO or NBBO, and if orders are marketable, will trade and/or route such orders based on price-time priority. After marketable orders have routed or traded, the Exchange will publish a quote for the next trading session.

With respect to order entry for the Core Trading Session, Rule 7.34P(c)(1)(C) currently provides that Limit Orders designated IOC and Cross Orders entered before or during the Early Trading Session and designated for the Core Trading Session will be rejected if entered before the Core Open Auction concludes. As such, a Limit Order designated IOC that is entered after 9:30:00, but before the Core Open Auction concludes, would be rejected.

Finally, Rule 7.18P(c)(2) provides that during a halt or pause in an Exchange-listed security, the Exchange retains resting orders in the NYSE Arca Book and assigns Limit Orders a working price and display price that is equal to the limit price of the order. The Exchange proposes to amend order and order instruction processing following an auction or when transitioning from one trading session to another to:

- Evaluate the status of orders that were live before the auction or in the earlier trading session and are eligible to trade after the auction/next trading session to assess whether to publish a new quote;
- After the Auction Processing Period ends, process orders that become eligible to trade in time sequence with specified cancel request; and
- Distinguish when requests to cancel, cancel and replace, and modify an order would be processed on arrival based on whether the impacted order was previously eligible to trade.

The Exchange believes that these proposed changes would simplify the transition to continuous trading following an auction or the transition from one trading session to another. Specifically, rather than waiting for all marketable orders to be traded or routed in price/time priority before publishing a quote, the Exchange would be evaluating orders at an earlier stage to determine whether to publish a quote. After publishing a quote, orders that become eligible to trade and related order instructions would be traded, routed, or quoted in time sequence. These proposed order processing changes would facilitate the Exchange in applying Price Bands, as defined in the Regulation NMS Plan to Address Extraordinary Market Volatility ("LULD Plan"),[5] immediately following an auction in Exchange-listed securities, rather than waiting for the securities information processor ("SIP") to publish such Price Bands based on the reference price provided by the Exchange for such securities.

To effect the rule change, the Exchange proposes to amend Rules 7.35P(g) and (h) to specify order and order instruction processing both during the Auction Processing Period and when transitioning to continuous trading. The Exchange also proposes to amend Rules 7.31P and 7.34P to specify that Limit Orders designated IOC and Cross Orders would be accepted during the Auction Processing Period. Finally, the Exchange proposes to amend Rule 7.18P to specify that orders that were on the NYSE Arca Book before a halt or pause would retain their last working and display price.

Proposed Rule Change

To effect the changes to how order instructions would be processed during the Auction Processing Period, the Exchange proposes to amend Rule 7.35P(g). As proposed, Rule 7.35P(g) would provide that new orders received during the Auction Processing Period would be accepted but would not be processed until after the Auction Processing Period. This proposed rule text is based on current Rule 7.35P(g), with a non-substantive change to specify that the processing would be "after the Auction Processing Period" rather than "until after the applicable auction concludes." The proposed change is designed to use consistent terminology throughout proposed Rule 7.35P(g) and (h) without any change to its meaning.

Proposed Rule 7.35P(g) would further provide that for purposes of paragraphs (g) and (h) of that rule, an "order instruction" refers to a request to cancel, cancel and replace, or modify an order. The current rule text does not currently specify how the Exchange would process requests to modify an order during the Auction Processing Period. However, because requests to modify an order would be handled in the same manner as requests to cancel or requests to cancel and replace and [sic] order, the Exchange proposes to include modifying an order in the definition of "order instruction." As further proposed, during the Auction Processing Period, order instructions would be processed as described in proposed Rules 7.35P(g)(1)–(2), which would replace the remainder of the current text of Rule 7.35P(g).

- Proposed Rule 7.35P(g)(1) would provide that an order instruction received during the Auction Processing Period would not be processed until after the Auction Processing Period if it relates to an order that was received before the Auction Processing Period. This proposed text is based on current Rule 7.35P(g) with no substantive changes, but with revised text to use consistent terminology. The proposed rule would further provide that any subsequent order instructions relating to such order would be rejected. This would be new functionality. The Exchange proposes to reject such subsequent order instructions because they may conflict with the previously-entered order instruction.[6] To avoid such a scenario, the Exchange proposes that any subsequent order instructions would be rejected.

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[4] The "Auction Processing Period" means the period during which the applicable auction is being processed. *See* Rule 7.35P(a)(2).

[5] *See* Securities Exchange Act Release No. 77679 (April 21, 2016), 81 FR 24908 (April 27, 2016) (File No. 4–631) (Order approving 10th Amendment to the LULD Plan) *and* Rule 7.11P.

- Proposed Rule 7.35P(g)(2) would provide that an order instruction received during the Auction Processing Period would be processed on arrival if it relates to an order that was received during the Auction Processing Period. This proposed rule text represents a substantive change from current Rule 7.35P(g), which provides that the Exchange rejects a request to cancel and replace an order that was entered during the Auction Processing Period. The Exchange believes that if the Exchange receives an order during the Auction Processing Period, because such order would not be eligible to participate in an auction and because such order is not yet eligible to trade following the auction or in the next trading session, there should be no restrictions on cancelling, replacing, or modifying such non-live order.

The Exchange also proposes to amend which orders may be entered during the Auction Processing Period. Currently, Rule 7.34P(c)(1)(C) provides that Limit Orders designated IOC and Cross Orders entered before or during the Early Trading Session and designated for the Core Trading Session will be rejected if entered before the Core Open Auction concludes. Because of the changes to order processing following the Auction Processing Period to process orders that are received during the Auction Processing Period in time sequence (as described in greater detail below), the Exchange proposes to accept Limit Orders designated IOC and Cross Orders during the Auction Processing Period. Because the Auction Processing Period occurs after 9:30 a.m. Eastern Time, an ETP Holder may be timing to send Limit Orders designated IOC as soon after 9:30 a.m. Eastern Time as feasible and would not know the precise time when the Exchange has transitioned to continuous trading. To avoid rejecting orders designated for the Core Trading Session that were entered during Core Trading Hours,[7] the Exchange proposes to amend Rule 7.34P(c)(1)(C) to provide that Limit Orders designated IOC and Cross Orders entered before or during the Early Trading Session and designated for the Core Trading Session would be rejected if entered before the Auction Processing Period for the Core Open Auction. The Exchange similarly proposes to amend Rules 7.31P(b)(2) and (g), which currently provide that a Limit Order with an IOC Modifier or a Limit IOC Cross Order will be cancelled if it arrives during auction processing, to delete the phrase "and it if arrives during auction processing, it will be cancelled."

The Exchange further proposes to amend Rule 7.34P(c)(2) to add new subparagraph (C) that would provide that Limit Orders designated IOC and Cross Orders entered before and during the Core Trading Session and designated for the Late Trading Session would be rejected if entered before the Auction Processing Period for the Closing Auction. Currently, the rule is silent on the treatment of Limit Orders designated IOC and Cross Orders that are designated for the Late Trading Session only and entered during the Core Trading Session or earlier, but the treatment is the same as provided for in current Rule 7.34P(c)(1)(C). The Exchange proposes to codify the treatment of such orders entered during the Core Trading Session, and in so doing, make the same substantive change as proposed for Rule 7.34P(c)(1)(C).

To effect the changes to how the Exchange would transition to continuous trading, the Exchange proposes to amend Rule 7.35P(h). The Exchange proposes a non-substantive clarifying change to the text of Rule 7.35P(h) to replace the phrase "the Exchange will transition to continuous trading session for the applicable trading session" with the phrase "the Exchange will transition to continuous trading following an auction or when transitioning from one trading session to another" to specify that Rule 7.35P(h) governs both trading session transition (which may involve an auction) and transition to continuous trading following a Trading Halt Auction. Rule 7.35P(h)(1), which is not changing, and proposed Rules 7.35P(h)(2)–(3), which will be new rule text, would specify how orders and order instructions would be processed as the Exchange transitions to continuous trading. The Exchange proposes to delete current Rule 7.35P(h)(2), (h)(3), and (h)(3)(A)–(D) (with the exception of the second sentence of current Rule 7.35P(h)(3)(B), which, as described below, will be included in proposed Rule 7.35P(h)(3)(C)).

Proposed Rule 7.35P(h)(2) would specify how the Exchange would process order instructions during the transition to continuous trading:

- Proposed Rule 7.35P(h)(2)(A) would provide that an order instruction received during the Auction Imbalance Freeze,[8] the transition to continuous trading, or the Auction Processing Period under paragraph (g)(1) of this Rule would be processed in time sequence with the processing of orders as specified in proposed Rule 7.35P(h)(3)(A) or (B) if it relates to an order that was received before the Auction Processing Period. As proposed, these order instructions would be processed in time sequence with the processing of orders as they become eligible to trade, as described below. Similar to proposed Rule 7.35P(g)(1), any subsequent order instructions relating to such order would be rejected. This proposed rule is based in part on current Rule 7.35P(h)(2)(A) [sic], which provides that any order instructions received during either the Auction Imbalance Freeze or Auction Processing Period that were not processed will be processed. The proposed changes are designed to provide more specificity that the specified order instructions would be processed in time sequence with all other order processing.
- Proposed Rule 7.35P(h)(2)(B) would provide that an order instruction received during the transition to continuous trading would be processed on arrival if it relates to an order that was entered during the Auction Processing Period or the transition to continuous trading. This proposed processing would therefore apply to orders that were not previously live and were entered after the Auction Processing Period began. Similar to proposed Rule 7.35P(g)(2), because these orders have not yet been processed, the Exchange believes it is appropriate to apply order instructions against such orders immediately.

Proposed Rule 7.35P(h)(3) would specify how orders would be processed when transitioning to continuous trading, as provided for in proposed Rules 7.35P(h)(3)(A)–(C):

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[6] For example, assume that during the Auction Processing Period, an ETP Holder sends a request to cancel and replace an order. While still in the Auction Processing Period, the ETP Holder then sends a request to cancel the original order. When those order instructions are processed in time sequence, the first instruction would result in a cancellation of the original order and a new order. The second instruction would be a cancellation of a non-existing order.

[7] "Core Trading Hours" means the hours of 9:30 a.m. Eastern Time through 4:00 p.m. Eastern Time or such other hours as may be determined by the Corporation from time to time. *See* Rule 1.1(j).

[8] The "Auction Imbalance Freeze" means the period that begins before the scheduled time for the Early Open Auction, Core Open Auction, or Closing Auction, as specified in Rules 7.35P(b), (c), and (d), and that ends once the Auction Processing Period begins. *See* Rule 7.35P(a)(3).

- Proposed Rule 7.35P(h)(3)(A) would provide that a quote would be published based on unexecuted orders that were eligible to trade in the trading sessions both before and after the transition or auction, *i.e.,* previously-live orders. This represents a substantive change from current Rule 7.35P(h)(3)(D), which provides that the Exchange will publish a quote only after all marketable orders have routed or traded. As proposed, the Exchange would publish a quote before evaluating the orders that were not previously eligible to trade. Proposed Rules 7.35P(h)(3)(A)(i) and (ii) would provide specificity regarding how such quote would be determined.

Proposed Rule 7.35P(h)(3)(A)(i) would provide that before publishing a quote when transitioning from a prior trading session or following the Early Open Auction, Core Open Auction, or Closing Auction: (1) Previously-live orders that are marketable would be traded, routed, or cancelled in time sequence; (2) a new quote would be published only if different from the last-published quote; [9] and (3) if the new published quote would be worse than the previously-published quote and would lock or cross the PBBO, the display price of Limit Orders would be adjusted consistent with Rule 7.31P(a)(2)(C).

Because the Exchange does not currently update its quote solely because it transitions from one trading session to another, the Exchange would not be changing that behavior when evaluating whether to publish a quote. When assessing whether previously-live orders are marketable, the Exchange would re-price them first, as provided for in proposed Rule 7.35P(h)(3)(C). If such orders would become marketable against each other or a protected quote, they would be traded or routed, as applicable. In addition, because such orders would be subject to LULD Plan Price Bands, such orders may be cancelled if priced through a Price Band.[10]

With respect to proposed cross reference to Rule 7.31P(a)(2)(C), that rule describes how the Exchange would not publish a new BBO that would lock or cross a PBBO that initially had locked or crossed our previously-displayed quote. Because of updates to the PBBO during the Auction Processing Period, a similar set of facts and circumstances could arise, and rather than publishing a new quote that would lock or cross the PBBO, the Exchange would adjust the display price of Limit Orders as provided for in Rule 7.31P(a)(2)(C) until such time that the limit price of such orders no longer locks or crosses the PBBO.[11]

Proposed Rule 7.35P(h)(3)(A)(ii) would provide that before publishing a quote following a Trading Halt Auction: (1) Previously-live Limit Orders that are designated with a Proactive if Locked/Crossed Modifier or that would be the result of reserve interest replenishing the fully-executed display quantity of a routable Reserve Order would route, if marketable against protected quotations on Away Markets; (2) previously-live orders marketable against other orders in the NYSE Arca Book that would not trade-through a protected quotation would trade; and (3) the display price of all other orders that are marketable against a protected quotation on an Away Market would be adjusted consistent with Rule 7.31P(a)(2)(C). The Exchange proposes this difference in processing following a Trading Halt Auction to avoid locking or crossing a protected quotation, the Exchange proposes to re-price the display price of such orders as provided for in Rule 7.31P(a)(2)(C). In addition, unlike a trading session transition change, because the Exchange would not have a published quote during a halt or pause, if there is sufficient interest, the Exchange would publish a quote at this stage following a Trading Halt Auction.

- Proposed Rule 7.35P(h)(3)(B) would provide that next, unexecuted orders that were not eligible to trade in the prior trading session (or were received during a halt or pause) or that were received during the Auction Processing Period, would be assigned a new working time at the end of the Auction Processing Period in time sequence relative to one another based on original entry time. This would be new processing of such orders. Currently, as provided for in Rule 7.36P(f)(1), an order is assigned a working time based on its original order entry time. That would remain true for such orders for purposes of participation in the applicable auction.[12] However, as proposed, after the Auction Processing Period, the Exchange would assign a new working time to such orders, *i.e.,* orders that were not previously live. This proposed change is similar to how Bats BZX Exchange, Inc. ("Bats") and the Nasdaq Stock Market LLC ("Nasdaq") process orders following an auction that were not previously live.[13] By assigning a new working time, in continuous trading, such orders would no longer have time priority over orders that were entered later, but were eligible to trade in the prior trading session.[14]

- Proposed Rule 7.35P(h)(3)(C) would provide that when processing orders, the display price and working price of an order would be adjusted based on the PBBO or NBBO, as provided for in Rule 7.31P. This rule text is based on the first sentence of current Rule 7.31P(h)(3)(B). The second sentence of proposed Rule 7.35P(h)(3)(C) would retain the second sentence of current Rule 7.35P(h)(3)(B), which states that "when transitioning to continuous trading, the display price and working price of Day ISOs will be adjusted in the same manner as Arca Only Orders until the Day ISO is either traded in full or displayed at its limit price."

The Exchange also proposes to amend Rule 7.18P regarding order handling during a halt or pause. During a UTP Regulatory Halt, the Exchange cancels any unexecuted portions of Market Orders. The Exchange proposes to add that the Exchange would also cancel orders not eligible to trade in the current trading session on the NYSE Arca Book. For example, assume there is a UTP Regulatory Halt at 8:00 a.m. Eastern Time. If the Exchange receives notice of such halt, it would cancel any orders in the impacted security resting on the NYSE Arca Book that are designated for the Core Trading Session only or designated for the Core and Late Trading Sessions, *i.e.*, are not eligible to trade in the Early Trading Session, which is for purposes of this example, the current trading session. Because the Exchange does not conduct a Trading Halt Auction for UTP Securities, the Exchange proposes to cancel such non-live orders in order to reduce the potential for such orders to lock or cross a protected quotation if trading resumes in that security in the next trading session.

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[9] For example, assume that at 9:29 a.m. Eastern Time, NYSE Arca publishes a quote in XYZ of 100 shares 10.04 x 10.05 100 shares. Assume that after the Auction Processing Period, based on the orders that were previously eligible to trade, the quote would be 100 shares 10.04 x 10.05 100 shares. Because the quote has not changed, the Exchange would not republish that quote. By contrast, if the new quote is 100 shares 10.03 x 10.05 100 shares, the Exchange would publish a new quote.

[10] *See* Rule 7.11P(a)(5) (specifying when the Exchange would cancel buy (sell) orders priced above (below) the Upper (Lower) Price Band).

[11] For example, assume that before the Core Open Auction, the Exchange publishes a quote of 10.04 x 10.05, which is the NBBO. During the Auction Processing Period, an Away Market publishes a new protected offer of 10.02, which crosses the Exchange's best bid. That bid can stand its ground. However, if after the Auction Processing Period, the new Exchange best bid would be 10.03, because this is worse than the Exchange's last published best bid and would cross the new PBO of 10.02, the Exchange would adjust the display price of the Limit Order representing the best bid to 10.01 and the working price would be priced at 10.02.

[12] *See* Rule 7.35P(a)(6) (describing Auction Ranking, which is based on the price-time priority of such orders as specified in Rules 7.36P(c)–(g)).

[13] *See* Bats Rules 11.23(b)(3)(A) and (B) and (c)(3)(A) (previously-live orders, *i.e.,* "Limit order shares on the Continuous Book that are not executed in" an auction, will remain on the Bats' book and thus will be represented in the quote and orders that were not previously live, *i.e.,* "RHO Orders" will be added to the Bats' book at the conclusion of the Opening Auction); Nasdaq Rules 4752(c) and 4753(c)(1) (If no opening or trading halt cross, orders are added to the book, *i.e.,* the previously published quote, in time priority).

[14] For example, assume a Limit Order to buy for 10.00 designated for the Core Trading Session only (Order A) is entered at 8:00 a.m. Eastern Time. Assume next that a Limit Order to buy for 10.00 designated for both the Early and Core Trading Sessions (Order B) is entered at 9:00 a.m. Eastern Time, and is eligible to trade on arrival. Assume that Order B is not executed in the Early Trading Session. In the Core Trading Auction, Order A will have time priority over Order B. However, after the Auction Processing Period for the Core Open Auction ends, Order A will be assigned a new working time. In continuous trading Order B, which was eligible to trade earlier than Order A, would have time priority over Order A.

The Exchange also proposes to amend how orders are maintained on the NYSE Arca Book during a halt or pause. As proposed, rather than assign Limit Orders a working price and display price that is equal to the limit price of the Order, the Exchange proposes to amend Rule 7.18P(c)(2) to provide that during a halt or pause in Exchange-listed securities, it would maintain resting orders on the NYSE Arca Book at their last working price and display price. This proposed change would not alter how such orders would participate in a Trading Halt Auction, which would continue to be based on their limit price, and not their last working price.[15] Nor would it alter how they would be priced when transitioning to continuous trading, because as proposed in Rule 7.35P(h)(3)(C), the working price and display price of such orders would be adjusted based on any changes to the PBBO or NBBO, as provided for in Rule 7.31P. This proposed rule change would therefore not alter any priority for such orders, but would streamline order processing for the Exchange by eliminating an extra processing step. For consistency, the Exchange proposes to add the same clause to Rule 7.18P(b)(2).[16] Finally, the Exchange proposes to amend Rule 7.18P(c)(5) to provide more specificity of when the rules governing order acceptance during a halt or pause ends. Currently, the rule provides that the Exchange accepts all other incoming order instructions until the security has reopened. Because acceptance of orders and order instructions during the Auction Processing Period is governed by Rule 7.35P(g), the Exchange proposes to revise Rule 7.18P(c)(5) to provide that the Exchange would accept all other incoming order instructions until the Auction Processing Period for the Trading Halt Auction, at which point, Rule 7.35P(g) would govern the entry of incoming orders and order instructions.

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Because of the technology changes associated with this proposed rule change, the Exchange will announce by Trader Update the implementation date.

2. Statutory Basis

The proposed rule change is consistent with Section 6(b) of the Securities Exchange Act of 1934 (the "Act"),[17] in general, and furthers the objectives of Section 6(b)(5),[18] in particular, because it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, to remove impediments to, and perfect the mechanism of, a free and open market and a national market system and, in general, to protect investors and the public interest.

The Exchange believes the proposed changes would remove impediments to and perfect the mechanism of a free and open market and a national market system, and in general, to protect investors and the public interest, because they are designed to simplify order and order instruction processing both during the Auction Processing Period and when transitioning to continuous trading. Specifically, the Exchange believes that publishing a quote based on orders that were previously live before the new trading session or auction would result in the Exchange publishing an updated quote sooner than under current rules. In addition, the proposed change to process orders that become live after an auction or in a new trading session in time sequence rather than in price/time priority would similarly simplify order processing by processing such orders in the order they were received. The Exchange also believes that assigning a new working time to orders that were not live prior to the transition to continuous trading would preserve the time priority of those orders that were eligible to trade in an earlier trading session or before the auction. This proposed rule change is also based on how Bats and Nasdaq assign time priority to orders that were not live prior to an auction and that are added to the book after an auction.[19]

The Exchange also believes that the proposed changes to when the Exchange would process order instructions, both during the Auction Processing Period and when transitioning to continuous trading, are designed to provide consistent treatment of when order instructions would be processed, which would be based on when an order was entered. The Exchange believes that waiting to process order instructions that relate to an order that was entered before the Auction Processing Period (including order instructions entered during the Auction Imbalance Freeze that were not yet processed) would remove impediments to and perfect a free and open market and a national market system because it would ensure that a customer's order instructions would be processed in time sequence with the underlying order. Likewise, the Exchange believes that the proposed change to reject subsequent order instructions when order instructions are not processed on arrival, as provided for in proposed Rules 7.35P(g)(1) and 7.35P(2)(A) [sic], would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would reduce the potential for conflicting order instructions being entered for the same order. By contrast, the Exchange believes that if a new order is entered during a transition phase, such as the Auction Processing Period or the transition to continuous trading, ETP Holders do not have an expectation that such orders would be processed yet, and therefore processing order instructions relating to such new orders on arrival would remove impediments to and perfect the mechanism of a free and open market and a national market system by ensuring that the most recent instruction for such not-yet-live order is available when the order will be processed in time sequence with other orders.

The Exchange also believes that the proposed change to accept Limit Orders designated IOC and Cross Orders during the Auction Processing Period would remove impediments to and perfect the mechanism of a free and open market and a national market system. Specifically, the Exchange believes that ETP Holders that enter such orders after 9:30 a.m. Eastern Time or after 4:00 p.m. Eastern Time have an expectation that such orders would be eligible to trade consistent with the IOC instruction. Because an ETP Holder would not be able to pinpoint the precise timing of the Auction Processing Period for a security and because the Exchange would be processing orders in time sequence following the Auction Processing Period, the Exchange believes that the applicable IOC instruction would in essence be processed on arrival.

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[15] *See* Rule 7.35P(a)(6)(A) (Limit Orders, LOO Orders, and LOC orders will be ranked based on their limit price and not the price at which they would participate in the auction).

[16] The Exchange also proposes a non-substantive, technical amendment to fix a typographical error in Rule 7.18P(c) to use the term "Marketplace" instead of "Markeplace."

[17] 15 U.S.C. 78f(b).

[18] 15 U.S.C. 78f(b)(5).

[19] *See supra* note 13.

The Exchange believes that the proposed changes to Rule 7.18P would remove impediments to and perfect the mechanism of a free and open market and a national market system because they are designed to streamline order processing during a halt or pause. The Exchange further believes that the proposed change during a UTP Regulatory Halt to cancel orders that are not eligible to trade in the current trading session would remove impediments and perfect the mechanism of a free and open market and a national market system because the changes are designed to reduce the potential for such orders to lock or cross a protected quotation if trading resumes in that security in the next trading session.

The Exchange further believes that the proposed changes would remove impediments to and perfect the mechanism of a free and open market and in general, to protect investors and the public interest because the proposed changes would facilitate the Exchange in applying Price Bands under the LULD Plan to Exchange-listed securities immediately following the transition to the Core Trading Session or following a Trading Halt Auction during Core Trading Hours without waiting for such Price Bands to be published by the SIP based on the reference price provided by the Exchange.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange believes that the proposed rule change is not designed to address any competitive issues, but rather, to streamline and simplify order and order instruction processing both during and immediately after the Auction Processing Period.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the proposed rule change does not (i) significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A) of the Act[20] and Rule 19b–4(f)(6) thereunder.[21]

A proposed rule change filed pursuant to Rule 19b–4(f)(6) under the Act[22] normally does not become operative for 30 days after the date of its filing. However, Rule 19b–4(f)(6)(iii)[23] permits the Commission to designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has asked the Commission to waive the 30-day operative delay so that the proposal may become operative immediately upon filing. According to the Exchange, the proposed rule change would help the Exchange in providing more information about orders on the Arca Book at an earlier stage, would simplify certain order processing, and would facilitate the Exchange in applying LULD Price Bands immediately following an auction in Exchange-listed securities, rather than waiting for the SIP to publish such Price Bands based on a reference price provided by the Exchange. The Exchange further stated that it expects to be able to implement the technology changes supporting this proposed rule change in less than 30 days from filing. The Commission believes the waiver of the operative delay is consistent with the protection of investors and the public interest. Therefore, the Commission hereby waives the operative delay and designates the proposal operative upon filing.[24]

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule change should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov*. Please include File Number SR–NYSEArca–2016–117 on the subject line.

Paper Comments

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–NYSEArca–2016–117. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE.,

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[20] 15 U.S.C. 78s(b)(3)(A).

[21] 17 CFR 240.19b–4(f)(6). As required under Rule 19b–4(f)(6)(iii), the Exchange provided the Commission with written notice of its intent to file the proposed rule change, along with a brief description and the text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission.

[22] 17 CFR 240.19b–4(f)(6).

[23] 17 CFR 240.19b–4(f)(6)(iii).

[24] For purposes only of waiving the 30-day operative delay, the Commission has also considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NYSEArca–2016–117, and should be submitted on or before September 14, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[25]

Robert W. Errett,

Deputy Secretary.

[FR Doc. 2016–20209 Filed 8–23–16; 8:45 am]

BILLING CODE 8011–01–P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #14811 and #14812]

LOUISIANA Disaster #LA–00065

AGENCY: U.S. Small Business Administration.

ACTION: Notice.

SUMMARY: This is a Notice of the Presidential declaration of a major disaster for the State of Louisiana (FEMA–4277–DR), dated 08/14/2016.

Incident: Severe Storms and Flooding.

Incident Period: 08/11/2016 and continuing.

Effective Date: 08/14/2016.

Physical Loan Application Deadline Date: 10/13/2016.

Economic Injury (EIDL) Loan Application Deadline Date: 05/15/2017.

ADDRESSES: Submit completed loan applications to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.

FOR FURTHER INFORMATION CONTACT: A. Escobar, Office of Disaster Assistance, U.S. Small Business Administration, 409 3rd Street SW., Suite 6050, Washington, DC 20416.

SUPPLEMENTARY INFORMATION: Notice is hereby given that as a result of the President's major disaster declaration on 08/14/2016, applications for disaster loans may be filed at the address listed above or other locally announced locations.

The following areas have been determined to be adversely affected by the disaster:

Primary Counties (Physical Damage and Economic Injury Loans): East Baton Rouge, Livingston, Saint Helena, Tangipahoa.

Contiguous Counties (Economic Injury Loans Only):

Louisiana: Ascension, East Feliciana, Iberville, Jefferson, Saint Charles, Saint Tammany, St John the Baptist, Washington, West Baton Rouge.

Mississippi: Amite, Pike.

The Interest Rates are:

	Percent
For Physical Damage:	
Homeowners With Credit Available Elsewhere	3.125
Homeowners Without Credit Available Elsewhere	1.563
Businesses With Credit Available Elsewhere	6.250
Businesses Without Credit Available Elsewhere	4.000
Non-Profit Organizations With Credit Available Elsewhere	2.625
Non-Profit Organizations Without Credit Available Elsewhere	2.625
For Economic Injury:	
Businesses & Small Agricultural Cooperatives Without Credit Available Elsewhere	4.000
Non-Profit Organizations Without Credit Available Elsewhere	2.625

The number assigned to this disaster for physical damage is 14811B and for economic injury is 148120.

(Catalog of Federal Domestic Assistance Numbers 59002 and 59008)

James E. Rivera,

Associate Administrator for Disaster Assistance.

[FR Doc. 2016–20192 Filed 8–23–16; 8:45 am]

BILLING CODE 8025–01–P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #14749 and #14750]

West Virginia Disaster Number WV–00043

AGENCY: U.S. Small Business Administration.

ACTION: Amendment 5.

SUMMARY: This is an amendment of the Presidential declaration of a major disaster for the State of West Virginia (FEMA–4273–DR), dated 06/25/2016.

Incident: Severe Storms, Flooding, Landslides, and Mudslides.

Incident Period: 06/22/2016 through 06/29/2016.

Effective Date: 07/06/2016.

Physical Loan Application Deadline Date: 09/07/2016.

EIDL Loan Application Deadline Date: 03/27/2017.

ADDRESSES: Submit completed loan applications to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.

FOR FURTHER INFORMATION CONTACT: Alan Escobar, Office of Disaster Assistance, U.S. Small Business Administration, 409 3rd Street SW., Suite 6050, Washington, DC 20416.

SUPPLEMENTARY INFORMATION: The notice of the President's major disaster declaration for the State of West Virginia, dated 06/25/2016 is hereby amended to extend the deadline for filing applications for physical damages as a result of this disaster to 09/07/2016.

All other information in the original declaration remains unchanged.

(Catalog of Federal Domestic Assistance Numbers 59002 and 59008)

James E. Rivera,

Associate Administrator for Disaster Assistance.

[FR Doc. 2016–20193 Filed 8–23–16; 8:45 am]

BILLING CODE 8025–01–P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #14813 and #14814]

Louisiana Disaster Number LA–00066

AGENCY: U.S. Small Business Administration.

ACTION: Amendment 1.

SUMMARY: This is an amendment of the Presidential declaration of a major disaster for Public Assistance Only for the State of Louisiana (FEMA–4277–DR), dated 08/16/2016.

Incident: Severe Storms and Flooding.

Incident Period: 08/11/2016 and continuing.

Effective Date: 08/16/2016.

Physical Loan Application Deadline Date: 10/17/2016.

Economic Injury (EIDL) Loan Application Deadline Date: 05/16/2017.

ADDRESSES: Submit completed loan applications to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.

FOR FURTHER INFORMATION CONTACT: Alan Escobar, Office of Disaster Assistance, U.S. Small Business Administration, 409 3rd Street SW., Suite 6050, Washington, DC 20416.

SUPPLEMENTARY INFORMATION: The notice of the President's major disaster declaration for Private Non-Profit organizations in the State of Louisiana, dated 08/16/2016, is hereby amended to include the following areas as adversely affected by the disaster.

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[25] 17 CFR 200.30–3(a)(12).

Primary Counties: Avoyelles, Evangeline, Iberville, Jefferson Davis, Saint Martin, Saint Tammany, Washington, West Feliciana.

All other information in the original declaration remains unchanged.

(Catalog of Federal Domestic Assistance Numbers 59002 and 59008)

James E. Rivera,

Associate Administrator for Disaster Assistance.

[FR Doc. 2016–20195 Filed 8–23–16; 8:45 am]

BILLING CODE 8025–01–P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #14811 and #14812]

Louisiana Disaster Number LA–00065

AGENCY: U.S. Small Business Administration.

ACTION: Amendment 1.

SUMMARY: This is an amendment of the Presidential declaration of a major disaster for the State of Louisiana (FEMA–4277–DR), dated 08/14/2016.

Incident: Severe Storms and Flooding.

Incident Period: 08/11/2016 and continuing.

Effective Date: 08/16/2016.

Physical Loan Application Deadline Date: 10/13/2016.

EIDL Loan Application Deadline Date: 05/15/2017.

ADDRESSES: Submit completed loan applications to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.

FOR FURTHER INFORMATION CONTACT: A Escobar, Office of Disaster Assistance, U.S. Small Business Administration, 409 3rd Street SW., Suite 6050, Washington, DC 20416.

SUPPLEMENTARY INFORMATION: The notice of the Presidential disaster declaration for the State of Louisiana, dated 08/14/2016 is hereby amended to include the following areas as adversely affected by the disaster:

Primary Counties: (Physical Damage and Economic Injury Loans): Acadia, Ascension, East Feliciana, Iberia, Lafayette, Pointe Coupee, Saint Landry, Vermilion.

Contiguous Counties: (Economic Injury Loans Only):

Louisiana: Assumption, Avoyelles, Cameron, Concordia, Evangeline, Jefferson Davis, Saint James, Saint Martin, Saint Mary, West Feliciana.

Mississippi: Wilkinson.

All other information in the original declaration remains unchanged.

(Catalog of Federal Domestic Assistance Numbers 59002 and 59008)

James E. Rivera,

Associate Administrator for Disaster Assistance.

[FR Doc. 2016–20194 Filed 8–23–16; 8:45 am]

BILLING CODE 8025–01–P

DEPARTMENT OF STATE

[Public Notice: 9683]

Culturally Significant Objects Imported for Exhibition Determinations: "Fragonard: Drawing Triumphant—Works from New York Collections" Exhibition

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.;* 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, Delegation of Authority No. 236–3 of August 28, 2000 (and, as appropriate, Delegation of Authority No. 257 of April 15, 2003), I hereby determine that the objects to be included in the exhibition "Fragonard: Drawing Triumphant—Works from New York Collections," imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to loan agreements with the foreign owner or custodian. I also determine that the exhibition or display of the exhibit objects at the Metropolitan Museum of Art, New York, New York, from on or about October 6, 2016, until on or about January 8, 2017, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a list of the imported objects, contact the Office of Public Diplomacy and Public Affairs in the Office of the Legal Adviser, U.S. Department of State (telephone: 202–632–6471; email: *section2459@state.gov*). The mailing address is U.S. Department of State, L/PD, SA–5, Suite 5H03, Washington, DC 20522–0505.

Dated: August 17, 2016.

Mark Taplin,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2016–20353 Filed 8–23–16; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF STATE

[Public Notice 9684]

Culturally Significant Objects Imported for Exhibition Determinations: "Beckmann in New York" Exhibition

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), E.O. 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.;* 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, Delegation of Authority No. 236–3 of August 28, 2000, and Delegation of Authority No. 257 of April 15, 2003, I hereby determine that the objects to be included in the exhibition "Beckmann in New York," imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to loan agreements with the foreign owners or custodians. I also determine that the exhibition or display of the exhibit objects at the Metropolitan Museum of Art, New York, New York, from on or about October 18, 2016, until on or about February 20, 2017, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a list of the imported objects, contact the Office of Public Diplomacy and Public Affairs in the Office of the Legal Adviser, U.S. Department of State (telephone: 202–632–6471; email: *section2459@state.gov*). The mailing address is U.S. Department of State, L/PD, SA–5, Suite 5H03, Washington, DC 20522–0505.

Dated: August 17, 2016.

Mark Taplin,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2016–20351 Filed 8–23–16; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF STATE

[Public Notice 9686]

Culturally Significant Objects Imported for Exhibition Determinations: "Degas: A New Vision" Exhibition

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), E.O. 12047 of March 27, 1978, the

Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.;* 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, Delegation of Authority No. 236–3 of August 28, 2000, and Delegation of Authority No. 257 of April 15, 2003, I hereby determine that the objects to be included in the exhibition "Degas: A New Vision," imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to loan agreements with the foreign owners or custodians. I also determine that the exhibition or display of the exhibit objects at the Museum of Fine Arts, Houston, Houston, Texas, from on or about October 14, 2016, until on or about January 16, 2017, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a list of the imported objects, contact the Office of Public Diplomacy and Public Affairs in the Office of the Legal Adviser, U.S. Department of State (telephone: 202–632–6471; email: *section2459@state.gov*). The mailing address is U.S. Department of State, L/PD, SA–5, Suite 5H03, Washington, DC 20522–0505.

Dated: August 17, 2016.

Mark Taplin,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2016–20349 Filed 8–23–16; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF STATE

[Public Notice 9682]

Culturally Significant Objects Imported for Exhibition Determinations: "Yves Saint Laurent: The Perfection of Style" Exhibition

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), E.O. 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.;* 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, Delegation of Authority No. 236–3 of August 28, 2000 (and, as appropriate, Delegation of Authority No. 257 of April 15, 2003), I hereby determine that the objects to be included in the exhibition "Yves Saint Laurent: The Perfection of Style," imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to loan agreements with the foreign owners or custodians. I also determine that the exhibition or display of the exhibit objects at the Seattle Art Museum, Seattle, Washington, from on or about October 11, 2016, until on or about January 8, 2017, the Virginia Museum of Fine Arts, Richmond, Virginia, from on or about May 7, 2017, until on or about August 26, 2017, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a list of the imported objects, contact the Office of Public Diplomacy and Public Affairs in the Office of the Legal Adviser, U.S. Department of State (telephone: 202–632–6471; email: *section2459@state.gov*). The mailing address is U.S. Department of State, L/PD, SA–5, Suite 5H03, Washington, DC 20522–0505.

Dated: August 17, 2016.

Mark Taplin,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2016–20354 Filed 8–23–16; 8:45 am]

BILLING CODE 4710–05–P

DEPARTMENT OF STATE

[Public Notice: 9685]

Culturally Significant Objects Imported for Exhibition Determinations: "Drawings for Paintings in the Age of Rembrandt" Exhibition

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985; 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978, the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.;* 22 U.S.C. 6501 note, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, Delegation of Authority No. 236–3 of August 28, 2000, and Delegation of Authority No. 257 of April 15, 2003, I hereby determine that the objects to be included in the exhibition "Drawings for Paintings in the Age of Rembrandt," imported from abroad for temporary exhibition within the United States, are of cultural significance. The objects are imported pursuant to loan agreements with the foreign owners or custodians. I also determine that the exhibition or display of the exhibit objects at the National Gallery of Art, Washington, District of Columbia, from on or about October 4, 2016, until on or about January 2, 2017, and at possible additional exhibitions or venues yet to be determined, is in the national interest. I have ordered that Public Notice of these Determinations be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a list of the imported objects, contact the Office of Public Diplomacy and Public Affairs in the Office of the Legal Adviser, U.S. Department of State (telephone: 202–632–6471; email: *section2459@state.gov*). The mailing address is U.S. Department of State, L/PD, SA–5, Suite 5H03, Washington, DC 20522–0505.

Dated: August 17, 2016.

Mark Taplin,

Principal Deputy Assistant Secretary, Bureau of Educational and Cultural Affairs, Department of State.

[FR Doc. 2016–20350 Filed 8–23–16; 8:45 am]

BILLING CODE 4710–05–P

STATE JUSTICE INSTITUTE

SJI Board of Directors Meeting, Notice

AGENCY: State Justice Institute.

ACTION: Notice of meeting.

SUMMARY: The SJI Board of Directors will be meeting on Monday, September 12, 2016 at 1:00 p.m. The meeting will be held at the Multnomah County Circuit Court in Portland, Oregon. The purpose of this meeting is to consider grant applications for the 4th quarter of FY 2016, and other business. All portions of this meeting are open to the public.

ADDRESSES: Multnomah County Circuit Court, 1021 SW Fourth Avenue, Portland, Oregon, 97204.

FOR FURTHER INFORMATION CONTACT: Jonathan Mattiello, Executive Director, State Justice Institute, 11951 Freedom Drive, Suite 1020, Reston, VA 20190, 571–313–8843, *contact@sji.gov.*

Jonathan D. Mattiello,

Executive Director.

[FR Doc. 2016–20181 Filed 8–23–16; 8:45 am]

BILLING CODE P

SURFACE TRANSPORTATION BOARD

[Docket No. AB 6 (Sub-No. 467X)]

BNSF Railway Company—Discontinuance of Trackage Rights Exemption—in Big Stone, Swift, Chippewa, Yellow Medicine, and Renville Counties, Minn.

On August 4, 2016, BNSF Railway Company (BNSF) filed with the Surface Transportation Board (Board) a petition under 49 U.S.C. 10502 for exemption from the provisions of 49 U.S.C. 10903 to discontinue trackage rights over a 106.7-mile line of railroad (the Line) owned by Twin Cities & Western Railroad Company (TC&W), between milepost 600.7 at Ortonville and milepost 494.0 at Buffalo Lake in Big Stone, Swift, Chippewa, Yellow Medicine, and Renville Counties, Minn.[1] The Line traverses U.S. Postal Service Zip Codes 57216, 56276, 56278, 56208, 56227, 56262, 56265, 56260, 56241, 56285, 56284, 56230, 56277, 56295, 55310, 55342, and 55314.

To BNSF's knowledge, the Line does not contain any federally granted rights-of-way. Any documentation in BNSF's possession will be made available promptly to those requesting it.

The interest of railroad employees will be protected by the conditions set forth in *Oregon Short Line Railroad—Abandonment Portion Goshen Branch Between Firth & Ammon, in Bingham & Bonneville Counties, Idaho,* 360 I.C.C. 91 (1979).

By issuance of this notice, the Board is instituting an exemption proceeding pursuant to 49 U.S.C. 10502(b). A final decision will be issued by November 22, 2016.

Because this is a discontinuance proceeding and not an abandonment, trail use/rail banking and public use conditions are not appropriate. This action is categorically excluded from environmental review under 49 CFR 1105.6(c).

Any offer of financial assistance (OFA) under 49 CFR 1152.27(b)(2) to subsidize continued rail service will be due no later than 10 days after service of a decision granting the petition for exemption. Each OFA must be accompanied by the filing fee, which is currently set at $1,600. *See* 49 CFR 1002.2(f)(25).

All filings in response to this notice must refer to Docket No. AB 6 (Sub-No. 467X) and must be sent to: (1) Surface Transportation Board, 395 E Street SW., Washington, DC 20423–0001; and (2) Karl Morell, 655 Fifteenth Street NW., Suite 225, Washington, DC 20005. Replies to the petition are due on or before September 13, 2016.

Persons seeking further information concerning discontinuance procedures may contact the Board's Office of Public Assistance, Governmental Affairs, and Compliance at (202) 245–0238 or refer to the full abandonment and discontinuance regulations at 49 CFR pt. 1152. Questions concerning environmental issues may be directed to the Board's Office of Environmental Analysis at (202) 245–0305. [Assistance for the hearing impaired is available through the Federal Information Relay Service (FIRS) at 1–800–877–8339.]

Board decisions and notices are available on our Web site at *WWW.STB.DOT.GOV.*

Decided: August 18, 2016.

By the Board, Rachel D. Campbell, Director, Office of Proceedings.

Kenyatta Clay,

Clearance Clerk.

[FR Doc. 2016–20271 Filed 8–23–16; 8:45 am]

BILLING CODE 4915–01–P

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[1] BNSF's predecessor was granted authority to acquire the trackage rights as part of the transaction in *Burlington Northern Railroad—Trackage Rights Exemption—between Ortonville & Buffalo Lake, Minn,* FD 30191 (ICC served June 23, 1983). According to BNSF, its trackage rights agreement expired in 2008 and it has not performed any trackage rights operations over the Line since that time. BNSF also states that TC&W has continued to provide rail service over the Line since 2008.

SURFACE TRANSPORTATION BOARD

[Docket No. FD 36055]

Southeastern Land, LLC—Acquisition and Operation Exemption—Vaughan Railroad Company

Southeastern Land, LLC (Southeastern), a noncarrier, has filed a verified notice of exemption under 49 CFR 1150.31 to acquire from Vaughan Railroad Company (Vaughan), and to operate, approximately 14 miles of rail line between milepost 7.5 near Belva and milepost 22.0 on Twentymile Creek, northeast of Vaughan, in Nicholas and Fayette Counties, W. Va. (the Line).

In the verified notice, Southeastern states that Southeastern, Vaughan, and Vaughan's affiliates have entered into a Purchase and Sale Agreement (Agreement) under which Southeastern will purchase the 14-mile rail line in addition to certain other assets. The Line is currently not in use and has no active customers. After consummation of the transaction, Southeastern intends to provide service to future customers on the Line or contract with a third party to provide the service. According to Southeastern, the Line is subject to a trackage rights agreement with CSX Transportation, Inc.,[1] and a separate trackage rights agreement with Norfolk Southern Railway Co.[2]

According to Southeastern, the Agreement between Southeastern and Vaughan does not contain any provision that prohibits Southeastern from interchanging traffic or limits Southeastern's ability to interchange traffic with a third party.

Southeastern certifies that its projected revenues upon consummation of the proposed transaction will not result in Southeastern's becoming a Class I or Class II rail carrier and states that its projected annual revenues will not exceed $5 million.

This transaction may be consummated on or after September 7, 2016, the effective date of the exemption (30 days after the verified notice was filed).

If the verified notice contains false or misleading information, the exemption is void ab initio. Petitions to revoke the exemption under 49 U.S.C. 10502(d) may be filed at any time. The filing of a petition to revoke will not automatically stay the effectiveness of the exemption. Petitions to stay must be filed no later than August 31, 2016 (at least seven days before the exemption becomes effective).

An original and 10 copies of all pleadings, referring to Docket No. FD 36055 must be filed with the Surface Transportation Board, 395 E Street SW., Washington, DC 20423–0001. In addition, a copy of each pleading must be served on Rebecca S. Gohmann, General Counsel of Southeastern Land, LLC, 2408 Sir Barton Way, Suite 325, Lexington, KY 40509.

According to Southeastern, this action is categorically excluded from environmental review under 49 CFR 1105.6(c).

Board decisions and notices are available on our Web site at *WWW.STB.DOT.GOV.*

Decided: August 18, 2016.

By the Board, Rachel D. Campbell, Director, Office of Proceedings.

Kenyatta Clay,

Clearance Clerk.

[FR Doc. 2016–20377 Filed 8–23–16; 8:45 am]

BILLING CODE 4915–01–P

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[1] *See CSX Transp.—Trackage Rights Exemption—Vaughan R.R.,* FD 32695 (ICC served May 30, 1995).

[2] *See Consolidated Rail Corp.—Trackage Rights Exemption—Vaughan R.R.,* FD 32670 (ICC served May 3, 1995).

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Buy America Waiver Notification

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice.

SUMMARY: This notice provides information regarding FHWA's finding that a Buy America waiver is appropriate for the use of non-domestic iron and steel components of casings, housings, electrical, and mechanical equipment needed for rehabilitation of Isthmus Bridge in the State of Oregon.

DATES: The effective date of the waiver is August 25, 2016.

FOR FURTHER INFORMATION CONTACT: For questions about this notice, please contact Mr. Gerald Yakowenko, FHWA Office of Program Administration, (202) 366–1562, or via email at *gerald.yakowenko@dot.gov.* For legal questions, please contact Mr. William Winne, FHWA Office of the Chief Counsel, 202–366–1397, or via email at *William.Winne@dot.gov.* Office hours for the FHWA are from 8:00 a.m. to 4:30 p.m., E.T., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Electronic Access

An electronic copy of this document may be downloaded from the **Federal Register**'s home page at: *http://www.archives.gov* and the Government Printing Office's database at: *http://www.access.gpo.gov/nara.*

Background

The FHWA's Buy America policy in 23 CFR 635.410 requires a domestic manufacturing process for any steel or iron products (including protective coatings) that are permanently incorporated in a Federal-aid construction project. The regulation also provides for a waiver of the Buy America requirements when the application would be inconsistent with the public interest or when satisfactory quality domestic steel and iron products are not sufficiently available. This notice provides information regarding FHWA's finding that a Buy America waiver is appropriate for use of non-domestic iron and steel components of casings, housings, electrical, and mechanical equipment for rehabilitation of Isthmus Bridge in the State of Oregon.

In accordance with Division K, section 122 of the "Consolidated and Further Continuing Appropriations Act, 2015" (Pub. L. 113–235), FHWA published a notice of intent to issue a waiver on its Web site; *http://www.fhwa.dot.gov/construction/contracts/waivers.cfm?id=127* on June 9th. The FHWA received no comments in response to the publication. Based on all the information available to the agency, FHWA concludes that there are no domestic manufacturers of casings, housings, electrical and mechanical equipment for in-kind replacement and rehabilitation of Isthmus Bridge in Oregon.

In accordance with the provisions of section 117 of the SAFETEA–LU Technical Corrections Act of 2008 (Pub. L. 110–244, 122 Stat. 1572), FHWA is providing this notice as its finding that a waiver of Buy America requirements is appropriate. The FHWA invites public comment on this finding for an additional 15 days following the effective date of the finding. Comments may be submitted to FHWA's Web site via the link provided to the waiver page noted above.

Authority: 23 U.S.C. 313; Pub. L. 110–161, 23 CFR 635.410)

Issued on: August 15, 2016.

Gregory G. Nadeau,

Administrator, Federal Highway Administration.

[FR Doc. 2016–20230 Filed 8–23–16; 8:45 am]

BILLING CODE 4910–22–P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

[Docket No. FHWA–2016–0015]

Emergency Route Working Group (ERWG)—Federal Advisory Committee

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of Establishment of the Emergency Route Working Group; Request for Nominations.

SUMMARY: FHWA announces the establishment of the Emergency Route Working Group (ERWG) for a 2-year period. The ERWG will provide the U.S. Secretary of Transportation, through the Administrator of the FHWA, with advice and recommendations for the implementation of best practices for expeditious State approval of special permits for vehicles involved in emergency response and recovery. The ERWG will provide the U.S. Secretary of Transportation a written report by December 4, 2016, on its findings and recommendation for the implementation of best practices for expeditious State approval of special permits for vehicles involved in emergency response and recovery. The ERWG's advice and recommendations will work within existing legal authorities and not require changes in State or Federal law for DOT to implement.

DATES: The deadline for nominations for ERWG members must be received on or before September 23, 2016.

ADDRESSES: All nomination materials should be emailed to *erwg@dot.gov* or faxed to the attention of Crystal Jones at (202) 366–3225, or mailed to Crystal Jones, Federal Highway Administration, Office of Freight Management and Operations, Room E84–314, 1200 New Jersey Avenue SE., Washington, DC 20590. Any person needing accessibility accommodations should contact Crystal Jones at (202) 366–2976.

FOR FURTHER INFORMATION CONTACT: Crystal Jones, U.S. Department of Transportation, Federal Highway Administration, Room E84–314, 1200 New Jersey Avenue SE., Washington, DC 20590. Any person needing accessibility accommodations should contact Crystal Jones at (202) 366–2976; email: *erwgt@dot.gov.*

SUPPLEMENTARY INFORMATION: Section 5502 of the Fixing America's Surface Transportation (FAST) Act (P.L. 114–94, 129 Stat. 1312) requires the Secretary of Transportation to establish a working group to determine best practices for expeditious State approval of special permits for vehicles involved in emergency response and recovery. Pursuant to Section 9(a)(2) of the Federal Advisory Committee Act (FACA), and in accordance with 41 CFR 102–3.65, and following consultation with the Committee Management Secretariat, General Services Administration, notice is hereby given that the ERWG will be established for up to a 2-year period. The ERWG will provide the U.S. Secretary of Transportation, through the Administrator of the FHWA, with advice and recommendations for the implementation of best practices for expeditious State approval of special permits for vehicles involved in emergency response and recovery. The ERWG will provide the U.S. Secretary of Transportation a written report by December 4, 2016, on its findings and recommendations. The ERWG's advice and recommendations will work within existing legal authorities and not require changes in State or Federal law for DOT to implement.

The Department of Transportation is hereby soliciting nominations for members of the ERWG. The Federal Highway Administrator, on behalf of the Secretary of Transportation, will appoint up to 25 ERWG members. The

ERWG members selected will provide views and perspective on whether:

a. impediments currently exist that prevent expeditious State approval of special permits for vehicles involved in emergency response and recovery;

b. it is possible to pre-identify and establish emergency routes between States through which infrastructure repair materials could be delivered following a natural disaster or emergency;

c. a State could pre-designate an emergency route identified under paragraph (b) as a certified emergency route if a motor vehicle that exceeds the otherwise applicable Federal and State truck length or width limits may safely operate along such route during periods of declared emergency and recovery from such periods; and

d. an online map could be created to identify each pre-designated emergency route under paragraph (c), including information on specific limitations, obligations, and notification requirements along that route.

The ERWG membership will seek to balance the following interests to the extent practicable; but as required by law the membership shall include representatives from State highway transportation departments or agencies; relevant modal agencies within the DOT; emergency response or recovery experts; relevant safety groups; and entities affected by special permit restrictions during emergency response and recovery efforts. The ERGW members serve at the pleasure of the Secretary, but may serve for a term of 2 years or less. The Chair and Vice Chair of the ERWG will be appointed by the FHWA Administrator from among the selected members, and the ERWG is expected to meet 12 times before the termination, which is defined in law as 1 year after the group delivers the report to the Secretary of Transportation required under Section 5502(c) of the FAST Act. Subcommittees may be formed to address specific emergency route issues. Some ERWG members may be appointed as special Government employees and will be subject to certain ethical restrictions, and such members will be required to submit certain information in connection with the appointment process. With the exception of travel and per diem for official travel, members will serve without compensation.

Process and Deadline for Submitting Nominations: Qualified individuals can self-nominate or be nominated by any individual or organization. To be considered for the ERWG, nominators should submit the following information:

(1) Name, title, and relevant contact information (including phone, fax, and email address) of the individual requesting consideration;

(2) A letter of support from a company, union, trade association, or non-profit organization on letterhead containing a brief description why the nominee should be considered for membership;

(3) Short biography of nominee including professional and academic credentials;

(4) An affirmative statement that the nominee is not a federally registered lobbyist, and that the nominee understands that if appointed, the nominee will not be allowed to continue to serve as a ERWG member if the nominee becomes a federally registered lobbyist;

(5) An affirmative statement that the nominee meets all ERWG eligibility requirements.

Please do not send company, trade association, or organization brochures or any other information. Materials submitted should total two pages or less. Should more information be needed, DOT staff will contact the nominee, obtain information from the nominee's past affiliations, or obtain information from publicly available sources, such as the Internet.

Nominations may be emailed to *erwg@dot.gov* or faxed to the attention of Crystal Jones at (202) 366–2976, or mailed to Crystal Jones, Federal Highway Administration, Office of Freight Management and Operations, Room E84–314, 1200 New Jersey Avenue SE., Washington, DC 20590. Nominations must be received before September 23, 2016. Nominees selected for appointment to the ERWG will be notified by return email and by a letter of appointment.

A selection team comprising representatives from several DOT offices will review the nomination packages. The selection team will make recommendations regarding membership to the Secretary of Transportation through the Federal Highway Administrator based on criteria including (1) professional or academic expertise, experience, and knowledge; (2) stakeholder representation; (3) availability and willingness to serve; and (4) skills working in committees and advisory panels. The Federal Highway Administrator will submit a list of recommended candidates to the Secretary of Transportation for review and selection of ERWG members.

Nominations are open to all individuals without regard to race, color, religion, sex, national origin, age, mental or physical handicap, marital status, or sexual orientation. To ensure that recommendations to the Secretary take into account the needs of the diverse groups served by DOT, membership shall include, to the extent practicable, individuals with demonstrated ability to represent minorities, women, and persons with disabilities.

Issued in Washington, DC, on August 15, 2016.

Gregory G. Nadeau,

Administrator, Federal Highway Administration.

[FR Doc. 2016–20233 Filed 8–23–16; 8:45 am]

BILLING CODE 4910–22–P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Buy America Waiver Notification

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice.

SUMMARY: This notice provides information regarding FHWA's finding that a Buy America waiver is appropriate for the use of non-domestic submersible pumps; 1,200 GPM, 6'' diameter discharge with 42.4 ft. head compatible, with current well lift station 1 at I–94 in Fargo, North Dakota.

DATES: The effective date of the waiver is August 25, 2016.

FOR FURTHER INFORMATION CONTACT: For questions about this notice, please contact Mr. Gerald Yakowenko, FHWA Office of Program Administration, (202) 366–1562, or via email at *gerald.yakowenko@dot.gov.* For legal questions, please contact Mr. William Winne, FHWA Office of the Chief Counsel, 202–366–1397, or via email at *William.Winne@dot.gov.* Office hours for the FHWA are from 8:00 a.m. to 4:30 p.m., E.T., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Electronic Access

An electronic copy of this document may be downloaded from the **Federal Register**'s home page at: *http://www.archives.gov* and the Government Printing Office's database at: *http://www.access.gpo.gov/nara.*

Background

The FHWA's Buy America policy in 23 CFR 635.410 requires a domestic manufacturing process for any steel or iron products (including protective coatings) that are permanently incorporated in a Federal-aid construction project. The regulation also provides for a waiver of the Buy America requirements when the application would be inconsistent with the public interest or when satisfactory quality domestic steel and iron products are not sufficiently available. This notice provides information regarding FHWA's finding that a Buy America waiver is appropriate for use of non-domestic submersible pumps; 1,200 GPM, 6" diameter discharge with 42.4 ft. head, that is compatible with current well lift station 1 at I–94 in Fargo, North Dakota.

In accordance with Division K, section 122 of the "Consolidated and Further Continuing Appropriations Act, 2015" (Pub. L. 113–235), FHWA published a notice of intent to issue a waiver on its Web site; *http://www.fhwa.dot.gov/construction/contracts/waivers.cfm?id=128* on June 15th. The FHWA received no comments in response to the publication. Based on all the information available to the agency, FHWA concludes that there are no domestic manufacturers of submersible pumps; 1,200 GPM, 6" diameter discharge with 42.4 ft. head, that is compatible with current well lift station 1at I–94 in Fargo, North Dakota.

In accordance with the provisions of section 117 of the SAFETEA–LU Technical Corrections Act of 2008 (Pub. L. 110–244, 122 Stat. 1572), FHWA is providing this notice as its finding that a waiver of Buy America requirements is appropriate. The FHWA invites public comment on this finding for an additional 15 days following the effective date of the finding. Comments may be submitted to FHWA's Web site via the link provided to the waiver page noted above.

Authority: 23 U.S.C. 313; Pub. L. 110–161, 23 CFR 635.410.

Issued on: August 15, 2016.

Gregory G. Nadeau,

Administrator, Federal Highway Administration.

[FR Doc. 2016–20234 Filed 8–23–16; 8:45 am]

BILLING CODE 4910–22–P

DEPARTMENT OF TRANSPORTATION

Maritime Administration

[Docket No. MARAD–2016–0086]

Requested Administrative Waiver of the Coastwise Trade Laws: Vessel NISSI; Invitation for Public Comments

AGENCY: Maritime Administration, Department of Transportation.

ACTION: Notice.

SUMMARY: As authorized by 46 U.S.C. 12121, the Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to grant waivers of the U.S.-build requirement of the coastwise laws under certain circumstances. A request for such a waiver has been received by MARAD. The vessel, and a brief description of the proposed service, is listed below.

DATES: Submit comments on or before September 23, 2016.

ADDRESSES: Comments should refer to docket number MARAD–2016–0086. Written comments may be submitted by hand or by mail to the Docket Clerk, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590. You may also send comments electronically via the Internet at *http://www.regulations.gov.* All comments will become part of this docket and will be available for inspection and copying at the above address between 10 a.m. and 5 p.m., E.T., Monday through Friday, except federal holidays. An electronic version of this document and all documents entered into this docket is available on the World Wide Web at *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Bianca Carr, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE., Room W23–453, Washington, DC 20590. Telephone 202–366–9309, Email *Bianca.carr@dot.gov.*

SUPPLEMENTARY INFORMATION: As described by the applicant the intended service of the vessel NISSI is:

Intended Commercial Use of Vessel: "The intended commercial use of this vessel is for day charters and multiple day charters; its commercial use will be sporadic in nature and for the sole purpose of offsetting maintenance costs. The vessel and its intended use comply with all basic eligibility requirements."

Geographic Region: "Florida"

The complete application is given in DOT docket MARAD–2016–0086 at *http://www.regulations.gov.* Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR part 388, that the issuance of the waiver will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, a waiver will not be granted. Comments should refer to the docket number of this notice and the vessel name in order for MARAD to properly consider the comments. Comments should also state the commenter's interest in the waiver application, and address the waiver criteria given in § 388.4 of MARAD's regulations at 46 CFR part 388.

Privacy Act

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78).

By Order of the Maritime Administrator.

Dated: August 18, 2016.

T. Mitchell Hudson, Jr.,

Secretary, Maritime Administration.

[FR Doc. 2016–20289 Filed 8–23–16; 8:45 am]

BILLING CODE 4910–81–P

DEPARTMENT OF TRANSPORTATION

Maritime Administration

[Docket No. MARAD–2016 0084]

Requested Administrative Waiver of the Coastwise Trade Laws: Vessel JULIA; Invitation for Public Comments

AGENCY: Maritime Administration, Department of Transportation.

ACTION: Notice.

SUMMARY: As authorized by 46 U.S.C. 12121, the Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to grant waivers of the U.S.-build requirement of the coastwise laws under certain circumstances. A request for such a waiver has been received by MARAD. The vessel, and a brief description of the proposed service, is listed below.

DATES: Submit comments on or before September 23, 2016.

ADDRESSES: Comments should refer to docket number MARAD–2016–0084. Written comments may be submitted by hand or by mail to the Docket Clerk, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590. You may also send comments electronically via the Internet at *http://www.regulations.gov.* All comments will become part of this docket and will be available for inspection and copying at the above address between 10 a.m. and 5 p.m., E.T., Monday through Friday, except federal holidays. An electronic version of this document and all documents entered into this docket is available on the World Wide Web at *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Bianca Carr, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE., Room W23–453, Washington, DC 20590. Telephone 202–366–9309, Email *Bianca.carr@dot.gov.*

SUPPLEMENTARY INFORMATION: As described by the applicant the intended service of the vessel JULIA is:

Intended Commercial Use of Vessel: "Daytime sightseeing tours in New York Harbor and private charters for groups up to 6"

Geographic Region: New York and New Jersey

The complete application is given in DOT docket MARAD–2016–0084 at *http://www.regulations.gov.* Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR part 388, that the issuance of the waiver will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, a waiver will not be granted. Comments should refer to the docket number of this notice and the vessel name in order for MARAD to properly consider the comments. Comments should also state the commenter's interest in the waiver application, and address the waiver criteria given in § 388.4 of MARAD's regulations at 46 CFR part 388.

Privacy Act

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By Order of the Maritime Administrator.

Dated: August 16, 2016.

T. Mitchell Hudson, Jr.,

Secretary, Maritime Administration.

[FR Doc. 2016–20223 Filed 8–23–16; 8:45 am]

BILLING CODE 4910–81–P

DEPARTMENT OF TRANSPORTATION

Maritime Administration

[Docket No. MARAD–2016 0085]

Requested Administrative Waiver of the Coastwise Trade Laws: Vessel KIA ORA; Invitation for Public Comments

AGENCY: Maritime Administration, Department of Transportation.

ACTION: Notice.

SUMMARY: As authorized by 46 U.S.C. 12121, the Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to grant waivers of the U.S.-build requirement of the coastwise laws under certain circumstances. A request for such a waiver has been received by MARAD. The vessel, and a brief description of the proposed service, is listed below.

DATES: Submit comments on or before September 23, 2016.

ADDRESSES: Comments should refer to docket number MARAD–2016–0085. Written comments may be submitted by hand or by mail to the Docket Clerk, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590. You may also send comments electronically via the Internet at *http://www.regulations.gov.* All comments will become part of this docket and will be available for inspection and copying at the above address between 10 a.m. and 5 p.m., E.T., Monday through Friday, except federal holidays. An electronic version of this document and all documents entered into this docket is available on the World Wide Web at *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Bianca Carr, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE., Room W23–453, Washington, DC 20590. Telephone 202–366–9309, Email *Bianca.carr@dot.gov.*

SUPPLEMENTARY INFORMATION:

As described by the applicant the intended service of the vessel KIA ORA is:

Intended Commercial Use of Vessel: Bareboat and Captained pleasure charters.

Geographic Region: "Florida."

The complete application is given in DOT docket MARAD–2016–0085 at *http://www.regulations.gov.* Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR part 388, that the issuance of the waiver will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, a waiver will not be granted. Comments should refer to the docket number of this notice and the vessel name in order for MARAD to properly consider the comments. Comments should also state the commenter's interest in the waiver application, and address the waiver criteria given in § 388.4 of MARAD's regulations at 46 CFR part 388.

Privacy Act

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78).

By Order of the Maritime Administrator

Dated: August 16, 2016.

T. Mitchell Hudson, Jr.,

Secretary, Maritime Administration.

[FR Doc. 2016–20226 Filed 8–23–16; 8:45 am]

BILLING CODE 4910–81–P

DEPARTMENT OF TRANSPORTATION

Maritime Administration

[Docket No. MARAD–2016 0082]

Requested Administrative Waiver of the Coastwise Trade Laws: Vessel ANGARI; Invitation for Public Comments

AGENCY: Maritime Administration, Department of Transportation.

ACTION: Notice.

SUMMARY: As authorized by 46 U.S.C. 12121, the Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to grant waivers of the U.S.-build requirement of the coastwise laws under certain circumstances. A request for such a waiver has been received by MARAD. The vessel, and a brief description of the proposed service, is listed below.

DATES: Submit comments on or before September 23, 2016.

ADDRESSES: Comments should refer to docket number MARAD–2016–0082. Written comments may be submitted by hand or by mail to the Docket Clerk, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590. You may also send comments electronically via the Internet at *http://www.regulations.gov.* All comments will become part of this docket and will be available for inspection and copying at the above address between 10 a.m. and 5 p.m., E.T., Monday through Friday, except federal holidays. An electronic version of this document and all documents entered into this docket is available on the World Wide Web at *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Bianca Carr, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE., Room W23–453, Washington, DC 20590. Telephone 202–366–9309, Email *Bianca.carr@dot.gov.*

SUPPLEMENTARY INFORMATION: As described by the applicant the intended service of the vessel ANGARI is:

Intended Commercial Use of Vessel: "The vessel is owned and operated by a non-profit foundation in order to fulfill its mission. The Foundation is dedicated to creating a global community that is interested, knowledgeable and invested in marine and environmental sciences by directly supporting research initiatives that foster a greater trust and dialogue between scientists and the public. The Foundation also uses innovative technology, film and other media to raise awareness and strengthen science education. The vessel offers dedicated indoor and outdoor research and work space as well as living areas. Vessel charter will mainly consist of research and educational trips with scientists, teachers and film crews onboard. The vessel will be uninspected and operate along the U.S. East Coast and Gulf of Mexico, including the Florida Keys and Dry Tortugas."

Geographic Region: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Washington DC, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas.

The complete application is given in DOT docket MARAD–2016–0082 at *http://www.regulations.gov.* Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR part 388, that the issuance of the waiver will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, a waiver will not be granted. Comments should refer to the docket number of this notice and the vessel name in order for MARAD to properly consider the comments. Comments should also state the commenter's interest in the waiver application, and address the waiver criteria given in § 388.4 of MARAD's regulations at 46 CFR part 388.

Privacy Act

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By Order of the Maritime Administrator.

Dated: August 16, 2016.

T. Mitchell Hudson, Jr.,

Secretary, Maritime Administration.

[FR Doc. 2016–20222 Filed 8–23–16; 8:45 am]

BILLING CODE 4910–81–P

DEPARTMENT OF TRANSPORTATION

Maritime Administration

[Docket No. MARAD–2016 0083]

Requested Administrative Waiver of the Coastwise Trade Laws: Vessel OCEANFLYER; Invitation for Public Comments

AGENCY: Maritime Administration, Department of Transportation.

ACTION: Notice.

SUMMARY: As authorized by 46 U.S.C. 12121, the Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to grant waivers of the U.S.-build requirement of the coastwise laws under certain circumstances. A request for such a waiver has been received by MARAD. The vessel, and a brief description of the proposed service, is listed below.

DATES: Submit comments on or before September 23, 2016.

ADDRESSES: Comments should refer to docket number MARAD–2016–0083. Written comments may be submitted by hand or by mail to the Docket Clerk, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590. You may also send comments electronically via the Internet at *http://www.regulations.gov.* All comments will become part of this docket and will be available for inspection and copying at the above address between 10 a.m. and 5 p.m., E.T., Monday through Friday, except federal holidays. An electronic version of this document and all documents entered into this docket is available on the World Wide Web at *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Bianca Carr, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE., Room W23–453, Washington, DC 20590. Telephone 202–366–9309, Email *Bianca.carr@dot.gov.*

SUPPLEMENTARY INFORMATION: As described by the applicant the intended service of the vessel OCEANFLYER is:

Intended Commercial Use of Vessel: "Training in maneuvering and safe seamanship Rental Charter."

Geographic Region: "Washington State."

The complete application is given in DOT docket MARAD–2016–0083 at *http://www.regulations.gov.* Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR part 388, that the issuance of the waiver will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, a waiver will not be granted. Comments should refer to the docket number of this notice and the vessel name in order for MARAD to properly consider the comments. Comments should also state the commenter's interest in the waiver application, and address the waiver criteria given in § 388.4 of MARAD's regulations at 46 CFR part 388.

Privacy Act

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78).

By Order of the Maritime Administrator.

Dated: August 16, 2016.

T. Mitchell Hudson, Jr.,

Secretary, Maritime Administration.

[FR Doc. 2016–20224 Filed 8–23–16; 8:45 am]

BILLING CODE 4910–81–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA–2015–0031; Notice 2]

BMW of North America, LLC, Denial of Petition for Decision of Inconsequential Noncompliance

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT)

ACTION: Denial of petition.

SUMMARY: BMW of North America, LLC (BMW), a subsidiary of BMW AG in Munich, Germany, has determined that certain model year (MY) 2014–2015 BMW R nineT motorcycles do not fully comply with paragraph S6.4.3(a) (Table V–b) of Federal Motor Vehicle Safety Standard (FMVSS) No. 108, *Lamps, Reflective Devices and Associated Equipment.* BMW has filed an appropriate report dated February 20, 2015, pursuant to 49 CFR part 573, *Defect and Noncompliance Responsibility and Reports.* BMW then petitioned NHTSA under 49 CFR part 556 requesting a decision that the subject noncompliance is inconsequential to motor vehicle safety.

ADDRESSES: For further information on this decision contact Mike Cole, Office of Vehicle Safety Compliance, the National Highway Traffic Safety Administration (NHTSA), telephone (202) 366–5319, facsimile (202) 366–5930.

SUPPLEMENTARY INFORMATION:

I. BMW's Petition: Pursuant to 49 U.S.C. 30118(d) and 30120(h) (see implementing rule at 49 CFR part 556), BMW submitted a petition for an exemption from the notification and remedy requirements of 49 U.S.C. Chapter 301 on the basis that this noncompliance is inconsequential to motor vehicle safety.

Notice of receipt of BMW's petition was published, with a 30-day public comment period, on June 4, 2015 in the **Federal Register** (80 FR 31966). No comments were received. To view the petition and all supporting documents log onto the Federal Docket Management System (FDMS) Web site at: *http://www.regulations.gov/.* Then follow the online search instructions to locate docket number "NHTSA–2015–0031."

II. Motorcycles Involved: Affected are approximately 1,792 MY 2014–2015 BMW R nineT motorcycles manufactured between November 27, 2013 and January 26, 2015.

III. Noncompliance: BMW explains that, due to an obstruction caused by the tail lamp assembly, the noncompliance is that the rear turn signal lamps were manufactured with a corner point of 5°IB. The turn signal lamps should have had a corner point of 20°IB as required by paragraph S6.4.3(a) (Table V–b) of FMVSS No. 108.

BMW has since revised its petition to indicate that the obstructed lens area was 666 sq-mm and that the photometric test point (20°IB/5° down) was also obstructed and measured only 1.1 cd (FMVSS No. 108, S6.1.3.1 and S7.1.2.13.2).

IV. Rule Text: FMVSS No 108 requires in pertinent part:

> Paragraph S6.1.3.1: Each lamp, reflective device, and item of associated equipment must be securely mounted on a rigid part of the vehicle, other than glazing, that is not designed to be removed except for repair, within the mounting location and height limits as specified in Table I, and in a location where it complies with all applicable photometric requirements, effective projected luminous lens area requirements, and visibility requirements with all obstructions considered;
>
> Paragraph S6.4.3(a): When a vehicle is equipped with any lamp listed in Table V-b each such lamp must provide not less than 1250 sq mm of unobstructed effective projected luminous lens area in any direction throughout the pattern defined by the corner points specified in Table V–b for each such lamp;
>
> Paragraph S7.1.2.13.2: As an alternative to S7.1.2.13.1, a rear turn signal lamp installed on a motorcycle may be designed to conform to the photometry requirements of Table XIII–a.

V. Summary of BMW's Analyses: BMW stated its belief that the subject noncompliance is inconsequential to motor vehicle safety for the following reasons:

(A) BMW states that when the subject motorcycles are upright on a level surface and equipped with standard tires at their recommended cold tire inflation pressure; the lower edge of the rear turn signal lenses are approximately 747 mm above ground, the lower edge of the tail lamp lens is approximately 710 mm above ground and the tail lamp lens extend upward. BMW believes that due to these geometric conditions there is some overlap in the vertical direction between the rear turn signal lenses and the tail lamp lens however, they are not aligned along the same longitudinal centerline [of the turn signals]. Specifically, the tail lamp is on the motorcycle's longitudinal centerline while the rear turn signals are on stalks offset from the centerline. As a result, BMW believes that this has a very minor affect upon the effective projected luminous lens area.

(B) BMW stated its belief that the obstruction from the tail lamp only occurs if another road user in a following vehicle has an eye-point of approximately 747 mm above ground (extremely low for an average vehicle) and is a worst-case-scenario. For other road users with a higher eye-point, there is no apparent obstruction and the turn signal would appear to meet the requirements of FMVSS No. 108.

(C) BMW also stated its belief that the effect of the noncompliance, *i.e.,* the overlap or interference of the turn signal lamp by the tail lamp does not occur during critical traffic conditions. A road user, who is following an affected motorcycle, and in the same lane as an affected motorcycle, will be able to fully view an affected motorcycle's rear turn signal at a distance of approximately 1,935 mm (approximately 6 ft). BMW believes that in most traffic conditions, a road user would not want to be closer to a motorcycle than 6 ft. Thus, this "non-visible" rear turn signal condition is not likely to occur during the vast majority of traffic conditions. BMW provided detailed analysis of specific travel conditions including following directly behind an affected motorcycle and overtaking/passing an affected motorcycle that it believes supports its conclusion that the condition caused by the subject noncompliance will not interfere with the safety of the motorcycle rider or another road user.

(D) BMW Customer Relations has not received any contacts from motorcycle riders, or other road users regarding this issue. Also, BMW is not aware of any accidents or injuries that have occurred as a result of this issue.

BMW has additionally informed NHTSA that it has corrected the noncompliance so that all future production of the subject vehicles will fully comply with FMVSS No. 108.

In summation, BMW believes that the described noncompliance of the subject motorcycles is inconsequential to motor vehicle safety, and that its petition, to exempt BMW from providing recall notification of noncompliance as required by 49 U.S.C. 30118 and remedying the noncompliance as required by 49 U.S.C. 30120 should be granted.

NHTSA'S Decision

NHTSA's Analysis of BMW's Arguments: BMW stated that a number of traffic conditions were analyzed to determine whether the noncompliance is perceptible to other road users and, if so, its affect upon safety.

The first condition BMW reviewed was the rear turn signal mounting height. BMW indicates that for another road user with a higher eye-point, there is no apparent obstruction[1] and the turn signal would appear to meet the requirements of FMVSS No. 108. While many road users will have higher eye-points on a flat road than the mounting height of these lamps, the downward requirements applicable to lamps are generally necessary for instances when other road users are below the preceding vehicles, such as vehicles cresting a hill. NHTSA has previously relaxed the provisions of downward photometric test angles for low mounted turn signal lamps,[2] however, this provision would not apply to BMW's turn signal lamps due to their moderately higher mounting height. Regardless, even for lower mounted lamps, the photometric test angles were relaxed at test points that were 15° down and 10° down only. Essentially, any photometric requirements for a low mounted turn signal lamp at the 15° down and 10° down locations are allowed to be met at 5° down. In the instant case, BMW's turn signal lamps (as installed) at the 20°IB/5° down test point are 75% below the required minimum photometric requirements. As such, we are not compelled by BMW's argument on this point.

The second condition that BMW reviewed was a traffic condition of "*Following Directly Behind an Affected Motorcycle.*" BMW's analysis in this case assumes that the motorcycle and following vehicle are in the same lane, and the motorcycle is on the left side of the lane directly in front (and inline) with the driver of the following vehicle. BMW argues that the following driver would have to be closer than 6 feet from the motorcycle for the lamp to become obstructed and that would be unlikely unless they were in bumper to bumper traffic. However, BMW did not analyze the case where the motorcycle and the following vehicle were in the same lane, but the motorcycle was oriented on the right hand side of the lane. In this instance, the motorcycle could be offset by 7.5 feet or more to the opposite side of the following driver, and the distance from the motorcycle where the right turn signal lamp would begin to become obstructed would be over 65 feet. This situation could occur when the motorcyclist is preparing for a right hand turn and the following driver may not receive the signal that the motorcycle is about to slow down for the turn. As such, we are not compelled by BMW's argument on this point.

The third condition that BMW reviewed was a traffic condition of "*Overtaking/Passing an Affected Motorcycle.*" BMW's analysis in this case assumes that the following vehicle is not in the same lane as the motorcycle and that if the motorcyclist used its turn signal to indicate a turn into the same lane as the following vehicle, the turn signal lamp would not be obstructed. In this case, where a motorcyclist indicates a turn into the same lane as a following vehicle, NHTSA agrees that the turn signal lamp on that side would not be obstructed.

NHTSA's Decision: In consideration of the foregoing, NHTSA finds that BMW has not met its burden of persuasion that the subject FMVSS No. 108 noncompliance described is inconsequential to motor vehicle safety. Accordingly, BMW's petition is hereby denied and BMW is obligated to provide notification of, and a free remedy for, that noncompliance under 49 U.S.C. 30118 and 30120.

Authority: 49 U.S.C. 30118, 30120: delegations of authority at 49 CFR 1.95 and 501.8.

Gregory K. Rea,

Associate Administrator for Enforcement.

[FR Doc. 2016–20250 Filed 8–23–16; 8:45 am]

BILLING CODE 4910–59–P

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[1] BMW later indicated that the obstruction of the turn signal that created the noncompliance was due to a redesigned stop lamp.

[2] See Final Rule at 69 FR 48805, August 11, 2004

DEPARTMENT OF THE TREASURY

Financial Crimes Enforcement Network

Proposed Renewal Without Change; Comment Request; Imposition of Special Measure Against Commercial Bank of Syria, Including Its Subsidiary Syrian Lebanese Commercial Bank, as a Financial Institution of Primary Money Laundering Concern

AGENCY: Financial Crimes Enforcement Network, Department of the Treasury.

ACTION: Notice and request for comments.

SUMMARY: As part of our continuing effort to reduce paperwork and respondent burden, FinCEN invites comment on a renewal, without change, to information collection requirements finalized on March 15, 2006 (71 FR 13260, RIN 1506–AA64), imposing a special measure against the Commercial Bank of Syria, including its subsidiary Syrian Lebanese Commercial Bank, as a financial institution of primary money laundering concern. This request for comments is being made pursuant to the Paperwork Reduction Act of 1995 ("PRA"), Public Law 104–13, 44 U.S.C. 3506(c)(2)(A).

DATES: Written comments are welcome and must be received on or before October 24, 2016.

ADDRESSES: You may submit comments identified by OMB Control Number 1506–0036, by any of the following methods:

- *Federal E-Rulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Mail:* Written comments should be submitted to: Financial Crimes Enforcement Network, P.O. Box 39, Vienna, VA 22183, Attention: Comment Request; Imposition of Special Measure against Commercial Bank of Syria.
- Please submit by one method only.
- All comments submitted by either method in response to this notice will become a matter of public record. Therefore, you should submit only information that you wish to make publicly available.

Inspection of comments: Comments, when received, are viewable on the *Regulations.gov* public Web site. Persons wishing to review the comments submitted may access the posted comments by going to *https://www.regulations.gov* and search on OMB Control Number 1506–0036.

FOR FURTHER INFORMATION CONTACT: The FinCEN Resource Center at 1–800–767–2825 or 1–703–905–3591 (not a toll free number) and select option 3 for regulatory questions. Email inquiries can be sent to *FRC@fincen.gov.*

SUPPLEMENTARY INFORMATION:

Abstract: The Director of the Financial Crimes Enforcement Network ("FinCEN") is the delegated administrator of the Bank Secrecy Act ("BSA"). The Act authorizes the Director to issue regulations to require all financial institutions defined as such pursuant to the Act to maintain or file certain reports or records that have been determined to have a high degree of usefulness in criminal, tax, or regulatory investigations or proceedings, or in the conduct of intelligence or counter-intelligence activities, including analysis, to protect against international terrorism.[1] Regulations implementing section 5318A of title 31, United States Code can be found in part at 31 CFR 1010.653. In general, the regulations require financial institutions, as defined at 31 U.S.C. 5312(a)(2) and 31 CFR 1010.100 to establish, document, and maintain programs as an aid in protecting and securing the U.S. financial system.

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[1] Public Law 91–508, as amended and codified at 12 U.S.C. 1829b, 12 U.S.C. 1951–1959 and 31 U.S.C. 5311–5332. Language expanding the scope of the BSA to intelligence or counter-intelligence activities to protect against international terrorism was added by section 358 of the Uniting and Strengthening America by Providing Appropriate

Title: Imposition of Special Measure against Commercial Bank of Syria, Including its Subsidiary Syrian Lebanese Commercial Bank, as a Financial Institution of Primary Money Laundering Concern.

Office of Management and Budget Control Number: 1506–0036.

Abstract: FinCEN is issuing this notice to renew the imposition of a special measure against the Commercial Bank of Syria, including its subsidiary Syrian Lebanese Commercial Bank, as a financial institution of primary money laundering concern, pursuant to the authority contained in 31 U.S.C. 5318A.

Current Action: Renewal without change to existing regulations.

Type of Review: Extension of a currently approved information collection.

Affected Public: Businesses and other for-profit institutions.

Burden: Estimated Number of Respondents: 5,000.

Estimated Number of Responses: 5,000.

Estimated Number of Hours: 5,000. (Estimated at one hour per respondent).

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid control number assigned by the Office of Management and Budget (“OMB”). Records required to be retained under the BSA must be retained for five years. Generally, information collected pursuant to the BSA is confidential but may be shared as provided by law with regulatory and law enforcement authorities.

Request for Comments: Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval. All comments will become a matter of public record. Comments are invited on: (a) Whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected: (d) Ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology; and (e) estimates of capital or start-up costs and costs of operation, maintenance and purchase of services to provide information.

Dated: August 19, 2016.

Jamal El-Hindi,

Acting Director, Financial Crimes Enforcement Network.

[FR Doc. 2016–20240 Filed 8–23–16; 8:45 am]

BILLING CODE 4810–02–P

Tools Required to Intercept and Obstruct Terrorism (“USA PATRIOT”) Act of 2001, Public Law 107–56.

DEPARTMENT OF THE TREASURY

Bureau of the Fiscal Service

Proposed Collection Of Information: CMIA Annual Report and Direct Cost Claims

ACTION: Notice and request for comments.

SUMMARY: The Department of the Treasury, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995, Public Law 104–13 (44 U.S.C. 3506(c)(2)(A). Currently the Bureau of the Fiscal Service within the Department of the Treasury is soliciting comments concerning the CMIA Annual Report and Direct Cost Claims.

DATES: Written comments should be received on or before October 24, 2016 to be assured of consideration.

ADDRESSES: Direct all written comments and requests for additional information to Bureau of the Fiscal Service, Bruce A. Sharp, 200 Third Street A4–A, Parkersburg, WV 26106–1328, or *bruce.sharp@fiscal.treasury.gov.*

SUPPLEMENTARY INFORMATION:

Title: CMIA Annual Report and Direct Cost Claims.

OMB Number: 1530–0066.

Transfer of OMB Control Number: The Financial Management Service (FMS) and the Bureau of the Public Debt (BPD) have consolidated to become the Bureau of the Fiscal Service (Fiscal Service). Information collection requests previously held separately by BPD and FMS will now be identified by a 1530 prefix, designating Fiscal Service.

Form Number: None.

Abstract: States and Territories must report interest owed to and from the Federal government for major Federal assistance programs on an annual basis. The data is used by Treasury and other Federal agencies to verify State and Federal interest claims, to assess State and Federal cash management practices and to exchange amounts of interest owed.

Current Actions: Extension of a currently approved collection.

Type of Review: Regular.

Affected Public: Federal Government, State, Local or Tribal Government.

Estimated Number of Respondents: 56.

Estimated Time per Respondent: Average 393.5 hours per state.

Estimated Total Annual Burden Hours: 22,036.

Request for Comments: Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval. All comments will become a matter of public record. Comments are invited on: (a) Whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology; and (e) estimates of capital or start-up costs and costs of operation, maintenance, and purchase of services to provide information.

Dated: August 18, 2016.

Bruce A. Sharp,

Bureau Clearance Officer.

[FR Doc. 2016–20147 Filed 8–23–16; 8:45 am]

BILLING CODE 4810–AS–P

UNITED STATES SENTENCING COMMISSION

Request for Applications; Tribal Issues Advisory Group

AGENCY: United States Sentencing Commission.

ACTION: Notice.

SUMMARY: The Commission has decided to establish a Tribal Issues Advisory Group as a standing advisory group pursuant to 28 U.S.C. 995 and Rule 5.4 of the Commission's Rules of Practice and Procedure. Having adopted a formal charter for the Tribal Issues Advisory Group, the Commission is constituting

the initial membership of the advisory group under that charter. Under the charter, the advisory group will consist of no more than 9 members. Of those 9 members, not more than 1 shall be a Federal judge; 2 shall be from the Executive Branch (one from the United States Department of Justice and one from the United States Department of the Interior); 1 shall be from a federal public defender organization or community defender organization; 1 shall be a tribal court judge; and not more than 4 shall be at-large members. To be eligible to serve as a member, an individual must have expertise, knowledge, and/or experience in the issues considered by the Tribal Issues Advisory Group. The Commission hereby invites any individual who is eligible to be appointed to the Federal judge membership, the tribal court judge membership, or the at-large membership of the Tribal Issues Advisory Group to apply. Application materials should be received by the Commission not later than October 24, 2016. An applicant for membership in the Tribal Issues Advisory Group should apply by sending a letter of interest and resume to the Commission as indicated in the **ADDRESSES** section below.

DATES: Application materials for the Federal judge, tribal court judge, and at-large memberships of the Tribal Issues Advisory Group should be received not later than October 24, 2016.

ADDRESSES: An applicant for the memberships of the Tribal Issues Advisory Group covered by this notice should apply by sending a letter of interest and resume to the Commission by electronic mail or regular mail. The email address is *pubaffairs@ussc.gov.* The regular mail address is United States Sentencing Commission, One Columbus Circle NE., Suite 2–500, South Lobby, Washington, DC 20002–8002, Attention: Public Affairs.

FOR FURTHER INFORMATION CONTACT: Christine Leonard, Director, Office of Legislative and Public Affairs, (202) 502–4500, *pubaffairs@ussc.gov.* More information about the Tribal Issues Advisory Group (including the advisory group charter) is available on the Commission's Web site at *http://www.ussc.gov/about/who-we-are/advisory-groups.*

SUPPLEMENTARY INFORMATION: The United States Sentencing Commission is an independent agency in the judicial branch of the United States Government. The Commission promulgates sentencing guidelines and policy statements for federal sentencing courts pursuant to 28 U.S.C. 994(a). The Commission also periodically reviews and revises previously promulgated guidelines pursuant to 28 U.S.C. 994(o) and submits guideline amendments to the Congress not later than the first day of May each year pursuant to 28 U.S.C. 994(p). Under 28 U.S.C. 995 and Rule 5.4 of the Commission's Rules of Practice and Procedure, the Commission may create standing or ad hoc advisory groups to facilitate formal and informal input to the Commission. Upon creating an advisory group, the Commission may prescribe the policies regarding the purpose, membership, and operation of the group as the Commission deems necessary or appropriate.

The Commission recently adopted a formal charter for the Tribal Issues Advisory Group. Under the charter, the purpose of the advisory group is:

(1) To assist the Commission in carrying out its statutory responsibilities under 28 U.S.C. 994(o);

(2) to provide to the Commission its views on federal sentencing issues relating to American Indian and Alaska Native defendants and victims, and to offenses committed in Indian country;

(3) to engage in meaningful consultation and outreach with tribes, tribal governments, and tribal organizations regarding federal sentencing issues that have tribal implications;

(4) to disseminate information regarding federal sentencing issues to tribes, tribal governments, and tribal organizations; and

(5) to perform any other related functions as the Commission requests.

The Tribal Issues Advisory Group shall consist of no more than 9 members. Of those 9 members, not more than 1 shall be a Federal judge; 2 shall be from the Executive Branch (one from the United States Department of Justice and one from the United States Department of the Interior); 1 shall be from a federal public defender organization or community defender organization; 1 shall be a tribal court judge; and not more than 4 shall be at-large members. All members are appointed by the Commission and shall have expertise, knowledge, and/or experience in the issues considered by the Tribal Issues Advisory Group. The Commission intends that the at-large membership shall include individuals with membership in or experience with tribes, tribal governments, and tribal organizations, appointed in a manner that ensures representation among tribal communities diverse in size, geographic location, and other unique characteristics.

All members of the Tribal Issues Advisory Group shall serve not more than two consecutive three-year terms. However, the terms of the initial membership shall be staggered so that 3 members serve a term of three years, 3 members serve a term of two years, and 3 members serve a term of one year.

The Commission invites any individual who is eligible to be appointed to the Federal judge membership, the tribal court judge membership, or the at-large membership of the Tribal Issues Advisory Group to apply by sending a letter of interest and a resume to the Commission as indicated in the **ADDRESSES** section above.

Authority: 28 U.S.C. 994(a), (o), (p), § 995; USSC Rules of Practice and Procedure 5.2, 5.4.

Patti B. Saris,

Chair.

[FR Doc. 2016–20247 Filed 8–23–16; 8:45 am]

BILLING CODE 2210–40–P

UNITED STATES SENTENCING COMMISSION

Final Priorities for Amendment Cycle

AGENCY: United States Sentencing Commission.

ACTION: Notice of final priorities.

SUMMARY: In June 2016, the Commission published a notice of possible policy priorities for the amendment cycle ending May 1, 2017. *See* 81 FR 37241 (June 9, 2016). After reviewing public comment received pursuant to the notice of proposed priorities, the Commission has identified its policy priorities for the upcoming amendment cycle and hereby gives notice of these policy priorities.

FOR FURTHER INFORMATION CONTACT: Christine Leonard, Director, Office of Legislative and Public Affairs, (202) 502–4500, *pubaffairs@ussc.gov.*

SUPPLEMENTARY INFORMATION: The United States Sentencing Commission is an independent agency in the judicial branch of the United States Government. The Commission promulgates sentencing guidelines and policy statements for federal sentencing courts pursuant to 28 U.S.C. 994(a). The Commission also periodically reviews and revises previously promulgated guidelines pursuant to 28 U.S.C. 994(o) and submits guideline amendments to the Congress not later than the first day of May each year pursuant to 28 U.S.C. 994(p).

Pursuant to 28 U.S.C. 994(g), the Commission intends to consider the issue of reducing costs of incarceration and overcapacity of prisons, to the extent it is relevant to any identified priority.

As part of its statutory authority and responsibility to analyze sentencing issues, including operation of the federal sentencing guidelines, the Commission has identified its policy priorities for the amendment cycle ending May 1, 2017. The Commission recognizes, however, that other factors, such as the enactment of any legislation requiring Commission action, may affect the Commission's ability to complete work on any or all of its identified priorities by the statutory deadline of May 1, 2017. Accordingly, it may be necessary to continue work on any or all of these issues beyond the amendment cycle ending on May 1, 2017.

As so prefaced, the Commission has identified the following priorities:

(1) Continuation of its work with Congress and other interested parties on statutory mandatory minimum penalties to implement the recommendations set forth in the Commission's 2011 report to Congress, titled Mandatory Minimum Penalties in the Federal Criminal Justice System, including its recommendations regarding the severity and scope of mandatory minimum penalties, consideration of expanding the "safety valve" at 18 U.S.C. 3553(f), and elimination of the mandatory "stacking" of penalties under 18 U.S.C. 924(c), and to develop appropriate guideline amendments in response to any related legislation.

(2) Continuation of its multi-year examination of the overall structure of the guidelines post-Booker, possibly including recommendations to Congress on any statutory changes and development of any guideline amendments that may be appropriate. As part of this examination, the Commission intends to study possible approaches to (A) simplify the operation of the guidelines, promote proportionality, and reduce sentencing disparities; and (B) appropriately account for the defendant's role, culpability, and relevant conduct.

(3) Continuation of its study of approaches to encourage the use of alternatives to incarceration.

(4) Continuation of its multi-year study of statutory and guideline definitions relating to the nature of a defendant's prior conviction (*e.g.*, "crime of violence," "aggravated felony," "violent felony," "drug trafficking offense," and "felony drug offense") and the impact of such definitions on the relevant statutory and guideline provisions (*e.g.*, career offender, illegal reentry, and armed career criminal), possibly including recommendations to Congress on any statutory changes that may be appropriate and development of guideline amendments that may be appropriate.

(5) Continuation of its comprehensive, multi-year study of recidivism, including (A) examination of circumstances that correlate with increased or reduced recidivism; (B) possible development of recommendations for using information obtained from such study to reduce costs of incarceration and overcapacity of prisons, and promote effectiveness of reentry programs; and (C) consideration of any amendments to the *Guidelines Manual* that may be appropriate in light of the information obtained from such study.

(6) Study of the findings and recommendations contained in the May 2016 Report issued by the Commission's Tribal Issues Advisory Group, and consideration of any amendments to the *Guidelines Manual* that may be appropriate in light of the information obtained from such study.

(7) Study of the treatment of youthful offenders under the *Guidelines Manual*.

(8) Examination of Chapter Four, Part A (Criminal History) to (A) study the treatment of revocation sentences under § 4A1.2(k), and (B) consider a possible amendment of § 4A1.3 (Departures Based on Inadequacy of Criminal History Category (Policy Statement)) to account for instances in which the time actually served was substantially less than the length of the sentence imposed for a conviction counted under the *Guidelines Manual*.

(9) Study of offenses involving MDMA/Ecstasy, synthetic cannabinoids (such as JWH–018 and AM–2201), and synthetic cathinones (such as Methylone, MDPV, and Mephedrone), and consideration of any amendments to the *Guidelines Manual* that may be appropriate in light of the information obtained from such study.

(10) Possible consideration of whether the weapon enhancement in § 2D1.1(b)(1) should be amended to conform to the "safety valve" provision at 18 U.S.C. 3553(f) and § 5C1.2 (Limitation on Applicability of Statutory Minimum Sentences in Certain Cases).

(11) Study of environmental offenses involving knowing endangerment resulting from mishandling hazardous or toxic substances, pesticides, or other pollutants, and consideration of any amendments to the *Guidelines Manual* that may be appropriate in light of the information obtained from such study.

(12) Implementation of the Bipartisan Budget Act of 2015, Public Law 114–74, and any other crime legislation enacted during the 114th or 115th Congress warranting a Commission response.

(13) Resolution of circuit conflicts, pursuant to the Commission's continuing authority and responsibility, under 28 U.S.C. 991(b)(1)(B) and *Braxton* v. *United States*, 500 U.S. 344 (1991), to resolve conflicting interpretations of the guidelines by the federal courts.

(14) Consideration of any miscellaneous guideline application issues coming to the Commission's attention from case law and other sources, including possible consideration of whether a defendant's denial of relevant conduct should be considered in determining whether a defendant has accepted responsibility for purposes of § 3E1.1.

Authority: 28 U.S.C. 994(a), (o); USSC Rules of Practice and Procedure 5.2.

Patti B. Saris,

Chair.

[FR Doc. 2016–20245 Filed 8–23–16; 8:45 am]

BILLING CODE 2210–40–P

DEPARTMENT OF VETERANS AFFAIRS

Privacy Act of 1974; System of Records

AGENCY: Department of Veterans Affairs (VA).

ACTION: Notice of amendment to system of records.

SUMMARY: As required by the Privacy Act of 1974, 5 U.S.C. 552a(e), notice is hereby given that the Department of Veterans Affairs (VA) is amending the system of records currently entitled "My Healthe*e*Vet Administrative Records-VA" (130VA19) as set forth in the **Federal Register** 75 FR 70365. VA is amending the system by revising the System Number, System Location, Categories of Individuals Covered by the System, Categories of Records in the System, Records Source Categories, Routine Uses of Records Maintained in the System, Retention and Disposal, System Manager, Record Access Procedure, and Notification Procedure. VA is republishing the system notice in its entirety.

DATES: Comments on the amendment of this system of records must be received no later than September 23, 2016. If no public comment is received, the amended system will become effective September 23, 2016.

ADDRESSES: Written comments concerning the amended system of records may be submitted through *www.regulations.gov;* by mail or hand-delivery to Director, Regulations Management (02REG), Department of Veterans Affairs, 810 Vermont Avenue NW., Room 1068, Washington, DC 20420; or by fax to (202) 273–9026. All comments received will be available for public inspection in the Office of Regulation Policy and Management, Room 1063B, between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday (except holidays). Please call (202) 461–4902 (this is not a toll-free number) for an appointment. In addition, during the comment period, comments may be viewed online through the Federal Docket Management System at *www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Veterans Health Administration (VHA) Privacy Officer, Department of Veterans Affairs, 810 Vermont Avenue NW., Washington, DC 20420; telephone (704) 245–2492.

SUPPLEMENTARY INFORMATION: The System Number is changed from 130VA19 to 130VA10P2 to reflect the current organizational alignment.

The System Location in this system of records is being amended to include contracted data storage location.

The Categories of Individuals Covered by the System is being amended to remove "grantee, family members and friends" and add "power of attorney and legal guardian" to section (2). Section (4) is being amended to replace "VHA Information Technology (IT)" with "VA Office of Information and Technology (OI&T)". The Categories of Records in the System is being amended to delete "grantee". The Record Source Categories is being amended to add "power of attorney" to section (2). Routine Uses of Records Maintained in the System is being deleted:

"8. Disclosure of information may be made to VA approved researchers to enhance, advance and promote both the function and the content of the My HealtheVet application."

This section is also being amended to add:

8. VA may disclose health information for research purposes determined to be necessary and proper to epidemiological and other research entities approved by the Under Secretary for Health or designee, such as the Medical Center Director of the facility where the information is maintained.

9. VA may disclose health information, including the name(s) and address(es) of present or former personnel of the Armed Services and/or their dependents, (a) to a Federal department or agency or (b) directly to a contractor of a Federal department or agency, at the written request of the head of the agency or the designee of the head of that agency, to conduct Federal research necessary to accomplish a statutory purpose of an agency. When this information is to be disclosed directly to the contractor, VA may impose applicable conditions on the department, agency, and/or contractor to ensure the appropriateness of the disclosure to the contractor.

The Retention and Disposal section is being amended to remove General Records Schedules (GRS) 20, item 1c and GRS 24, item 6a. This section will now include research and GRS 3.2 Item 031.

The System Manager(s) and Address, Notification Procedure, and Record Access Procedure sections are being amended to remove the Chief, Technical Infrastructure Division (31), Austin Automation Center, 1615 Woodward Street, Austin, Texas 78772. These sections will now include My Health*e*Vet Chief Information Officer, 55 Foothill Drive, Suite 400, Salt Lake City, Utah 84113.

The Report of Intent to Amend a System of Records Notice and an advance copy of the system notice have been sent to the appropriate Congressional committees and to the Director of the Office of Management and Budget (OMB) as required by 5 U.S.C. 552a(r) (Privacy Act) and guidelines issued by OMB (65 FR 77677), December 12, 2000.

Signing Authority

The Secretary of Veterans Affairs, or designee, approved this document and authorized the undersigned to sign and submit the document to the Office of the Federal Register for publication electronically as an official document of the Department of Veterans Affairs. Gina S. Farrisee, Deputy Chief of Staff, approved this document on August 2, 2016, for publication.

Dated: August 8, 2016.

Kathleen M. Manwell,

VA Privacy Service, Office of Privacy and Records Management, Department of Veterans Affairs.

130VA10P2

SYSTEM NAME:

My Health*e*Vet Administrative Records-VA.

SYSTEM LOCATION:

Records are maintained at Veterans Health Administration (VHA) facilities, VA National Data Centers, VA Health Data Repository (HDR), and at the contracted data storage system located in Culpepper, Virginia. Address locations for VHA facilities are listed in VA Appendix 1 of the biennial publications of the VA systems of records.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Title 38, United States Code, section 501.

PURPOSE(S):

The information in the My Health*e*Vet Administrative Records is needed to operate the My Health*e*Vet program including, but not limited to, registration and verification of the Veteran's identity or to register and authenticate those who have legal authority to participate in lieu of the Veteran, to assign and verify administrators of the My HealtheVet portal, to retrieve the Veteran's information to perform specific functions, and to allow access to specific information and provide other associated My Health*e*Vet electronic services in current and future applications of the My Health*e*Vet program. The administrative information may also be used to create administrative business reports for system owners and VA managers who are responsible for ensuring that the My Health*e*Vet system is meeting performance expectations and is in compliance with applicable Federal laws and regulations. Administrative information may also be used for evaluation to support program improvement, including VA approved research studies.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals covered by this system encompass: (1) All individuals who successfully register for a My Health*e*Vet account and whose identity has been verified; (2) Representatives of the above individuals who have been provided Delegate access to My Health*e*Vet including, but not limited to, Power of Attorney (POA), legal guardian, or VA and non-VA health care providers; (3) VA health care providers and certain administrative staff; (4) VA Office of Information and Technology (OI&T) staff and/or their approved contractors who may need to enter identifying, administrative information into the system to initiate, support, and maintain electronic services for My Health*e*Vet participants; and (5) VA researchers fulfilling VA required authorization procedures.

CATEGORIES OF RECORDS IN THE SYSTEM:

The records include personally identifiable information, such as an individual's full name; My Health*e*Vet User Identifier (ID); date of birth; Social Security number; email address; telephone number; mother's maiden name; ZIP code; place and date of registration for My Health*e*Vet; Delegate user IDs associated with My HealtheVet accounts; level of access to My HealtheVet electronic services; date and type of transaction; web analytics for the purpose of monitoring site usage; patient internal control number (ICN); and other administrative data needed for My HealtheVet roles and services.

RECORD SOURCE CATEGORIES:

The sources of information for this system of records include the individuals covered by this notice and an additional contributor, as listed below:

(1) All individuals who successfully register for a My HealtheVet account;

(2) Representatives of the above individuals who have been provided access to the private health space by the Veteran user, including but not limited to, POA, or VA and non-VA health care providers;

(3) VA health care providers;

(4) VA OI&T staff and/or their contractors and subcontractors who may need to enter information into the system to initiate, support and maintain My HealtheVet electronic services for My HealtheVet users;

(5) VistA and other VA IT systems;

(6) VA researchers fulfilling VA required authorization procedures (see VHA Handbook 1200.01 *http://www1.va.gov/vhapublications/ViewPublication.asp?pub_ID=2038*).

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

To the extent that records contained in the system include information protected by 45 CFR. Parts 160 and 164 (*i.e.,* individually identifiable health information), and 38 U.S.C. 7332 (*i.e.,* medical treatment information related to drug abuse, alcoholism or alcohol abuse, sickle cell anemia or infection with the human immunodeficiency virus), that information cannot be disclosed under a routine use unless there is also specific statutory authority in 38 U.S.C. 7332 and regulatory authority in 45 CFR parts 160 and 164 permitting disclosure.

1. Disclosure of information in this system of records may be made to private or public sector organizations, individuals, agencies, etc., with whom VA has a contract or agreement, including subcontractors, in order to administer the My HealtheVet program, or perform other such services as VA deems appropriate and practical for the purposes of administering VA laws.

2. On its own initiative, VA may disclose information, except for the names of My HealtheVet users and system administrators, to State, local, tribal or foreign agency charged with the responsibility of investigating or prosecuting civil, criminal or regulatory violations of law, or charged with enforcing or implementing the statute, regulation, rule or order issued pursuant thereto. On its own initiative, VA may disclose information including names of My HealtheVet users and system administrators to a Federal agency charged with the responsibility of investigating or prosecuting civil, criminal or regulatory violations of law, or charged with enforcing or implementing the statute, regulation, rule or order issued pursuant thereto.

3. VA may disclose information from this system to the National Archives and Records Administration (NARA) and General Services Administration in records management inspections conducted under title 44, United States Code (U.S.C.).

4. VA may disclose information from this system of records to the Department of Justice (DoJ), either on VA's initiative or in response to DoJ's request for the information, after either VA or DoJ determines that such information is relevant to DoJ's representation of the United States or any of its components in legal proceedings before a court or adjudicative body, provided that, in each case, the agency also determines prior to disclosure that release of the records to the DoJ is a use of the information contained in the records that is compatible with the purpose for which VA collected the records. VA, on its own initiative, may disclose records in this system of records in legal proceedings before a court or administrative body after determining that the disclosure of the records to the court or administrative body is a use of the information contained in the records that is compatible with the purpose for which VA collected the records.

5. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

6. Disclosure to other Federal agencies may be made to assist such agencies in preventing and detecting possible fraud or abuse by individuals in their operations and programs.

7. Disclosure of information may be made when (1) VA suspects or has confirmed that the integrity or confidentiality of information in the system of records has been compromised; (2) the Department has determined that as a result of the suspected or confirmed compromise, there is a risk of embarrassment or harm to the reputations of the record subjects, harm to economic or property interests, identity theft or fraud, or harm to the security or integrity of this system or other systems or programs (whether maintained by the Department or another agency or entity) that rely upon the compromised information; and (3) the disclosure is to agencies, entities, and persons whom VA determines are reasonably necessary to assist or carry out the Department's efforts to respond to the suspected or confirmed compromise and prevent, minimize, or remedy such harm. This routine use permits disclosure by the Department to respond to a suspected or confirmed data breach, including the conduct of any risk analysis or provision of credit protection services as provided in 38 U.S.C. 5724.

8. VA may disclose health information for research purposes determined to be necessary and proper to epidemiological and other research entities approved by the Under Secretary for Health or designee, such as the Medical Center Director of the facility where the information is maintained.

9. VA may disclose health information, including the name(s) and address(es) of present or former personnel of the Armed Services and/or their dependents, (a) to a Federal department or agency or (b) directly to a contractor of a Federal department or agency, at the written request of the head of the agency or the designee of the head of that agency, to conduct Federal research necessary to accomplish a statutory purpose of an agency. When this information is to be disclosed directly to the contractor, VA may impose applicable conditions on the department, agency, and/or contractor to ensure the appropriateness of the disclosure to the contractor.

POLICIES AND PRACTICES FOR STORAGE OF RECORDS:

My HealtheVet Administrative Records are maintained on paper and electronic media, including hard drive disks, which are backed up to tape at regular intervals.

POLICIES AND PRACTICES FOR RETRIEVABILITY OF RECORDS:

Records may be retrieved by an individual's name, user ID, date of registration for My HealtheVet electronic services, ZIP code, the VA assigned ICN, date of birth and/or Social Security number, if provided.

POLICIES AND PRACTICES FOR RETENTION AND DISPOSAL OF RECORDS:

Records are maintained and disposed of in accordance with the records disposition authority approved by the Archivist of the United States. Records from this system that are needed for audit purposes will be retained for at least six (6) years after a user's account becomes inactive. Routine records will be disposed of when the agency determines they are no longer needed for administrative, legal, audit, research, or other operational purposes, but no less than six (6) years from date of last account activity. These retention and disposal statements are pursuant to the currently applicable NARA General Records Schedule GRS 3.2 Item 031.

PHYSICAL, PROCEDURAL, AND ADMINISTRATIVE SAFEGUARDS:

1. Access to and use of the My Health*e*Vet Administrative Records are limited to those persons whose official duties require such access. VA has established security controls and procedures to ensure that access is appropriately limited. Information Security Officers and system data stewards review and authorize data access requests. VA regulates data access with security software that authenticates My Health*e*Vet administrative users and requires individually unique codes and passwords. VA provides Information Security training to all staff and instructs staff on the responsibility each person has for safeguarding data confidentiality. VA regularly updates security standards and procedures that are applied to systems and individuals supporting this program.
2. Physical access to computer rooms housing the My Health*e*Vet Administrative Records is restricted to authorized staff and protected by a variety of security devices. The Federal Protective Service or other security personnel provide physical security for the buildings housing computer systems and data centers.
3. Data transmissions between operational systems and My Health*e*Vet Administrative Records maintained by this system of records are protected by telecommunications security software and hardware as prescribed by Federal security and privacy laws as well as VA standards and practices. This includes firewalls, encryption, and other security measures necessary to safeguard data as it travels across the VA Wide Area Network.
4. Copies of back-up computer files are maintained at secure off-site locations.

SYSTEM MANAGER(S):

Official responsible for policies and procedures: Director of Veterans and Consumers Health Informatics Office, 8455 Colesville Road, Suite 1200, Silver Spring, Maryland 20910. Officials maintaining this system of record: VHA facilities (address locations for VHA facilities are listed in VA Appendix 1 of the biennial publications of the VA systems of records) and the My Health*e*Vet Chief Information Officer, 55 Foothill Drive, Suite 400, Salt Lake City, Utah 84113.

RECORD ACCESS PROCEDURE:

Individuals seeking information regarding access to and/or contesting of records in this system may write or call their local VHA facility and/or the My Health*e*Vet Chief Information Officer, 55 Foothill Drive, Suite 400, Salt Lake City, Utah 84113.

CONTESTING RECORD PROCEDURES:

(See Record Access Procedures above.)

NOTIFICATION PROCEDURE:

Individuals who wish to determine whether a record is being maintained under their name in this system or wish to determine the contents of such records have two options:

1. Submit a written request or apply in person to the VHA facility where the records are located. VHA facility location information can be found in the Facilities Locator section of VA's Web site at *http://www.va.gov;* or
2. Submit a written request or apply in person to the My Health*e*Vet Chief Information Officer, 55 Foothill Drive, Suite 400, Salt Lake City, Utah 84113.

Inquiries should include the person's full name, user ID, date of birth, and return address.

EXEMPTIONS PROMULGATED FOR THE SYSTEM:

None.

[FR Doc. 2016–20217 Filed 8–23–16; 8:45 am]

BILLING CODE P

NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

1985

FEDERAL REGISTER

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Part II

Environmental Protection Agency

40 CFR Parts 50, 51, and 93

Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 50, 51, and 93

[EPA–HQ–OAR–2013–0691; FRL–9946–36–OAR]

RIN 2060–AQ48

Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is finalizing requirements that state, local and tribal air agencies would have to meet as they implement the current and future national ambient air quality standards (NAAQS) for fine particulate matter ($PM_{2.5}$). Specifically, this document provides details on meeting the statutory state implementation plan (SIP) requirements that apply to areas designated nonattainment for any $PM_{2.5}$ NAAQS, such as: General requirements for attainment plan due dates and attainment dates; emissions inventories; attainment demonstrations; provisions for demonstrating reasonable further progress; quantitative milestones; contingency measures; and nonattainment New Source Review (NNSR) permitting programs, among other things. This rule clarifies the specific attainment planning requirements that apply to $PM_{2.5}$ NAAQS nonattainment areas based on their classification (either Moderate or Serious), and the process for reclassifying Moderate areas to Serious. Additionally, in this document the EPA is revoking the 1997 primary annual standard for areas designated as attainment for that standard because the EPA revised the primary annual standard in 2012. The EPA first established the $PM_{2.5}$ NAAQS in 1997, completed a review and revision of those standards in 2006, and most recently completed a review and revision of the $PM_{2.5}$ NAAQS on December 14, 2012.

DATES: This final rule is effective on October 24, 2016.

ADDRESSES: The EPA has established a docket for this action, identified by Docket ID No. EPA–HQ–OAR–2013–0691. All documents in the docket are listed in the *http://www.regulations.gov* Web site. Although listed in the index, some information is not publicly available, *e.g.,* Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: For general information on this rule, contact Mr. Rich Damberg, Office of Air Quality Planning and Standards, U.S. EPA, by phone at (919) 541–5592 or by email at *damberg.rich@epa.gov;* or Mr. Patrick Lessard, Office of Air Quality Planning and Standards, U.S. EPA, by phone at (919) 541–5383 or by email at *lessard.patrick@epa.gov.* For information on the Information Collection Request (ICR), contact Mr. Butch Stackhouse, Office of Air Quality Planning and Standards, U.S. EPA, by phone at (919) 541–5208 or by email at *stackhouse.butch@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. General Information

A. Preamble Glossary of Terms and Acronyms

The following are abbreviations of terms used in the preamble.

AERR	Air Emissions Reporting Requirements
BACM	Best Available Control Measures
BACT	Best Available Control Technology
BART	Best Available Retrofit Technology
BC	Black Carbon
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CAMx	Comprehensive Air Quality Model with Extensions
CBI	Confidential Business Information
CBSA	Core-based Statistical Area
CDD	Clean Data Determination
CFR	Code of Federal Regulations
CMAQ	Community Multi-Scale Air Quality Model
CSAPR	Cross-State Air Pollution Rule
CSN	Chemical Speciation Network
DOD	Department of Defense
DOT	Department of Transportation
EC	Elemental Carbon
EGU	Electric Generating Unit
EPA	Environmental Protection Agency
Fe	Iron
FEM	Federal Equivalent Method
FIP	Federal Implementation Plan
FRM	Federal Reference Method
HCl	Hydrogen Chloride
ICR	Information Collection Request
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MATS	Mercury and Air Toxics Standards
MSM	Most Stringent Measures
MPO	Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NAPAP	National Acid Precipitation Assessment Program
NEI	National Emissions Inventory
NESHAP	National Emissions Standard for Hazardous Air Pollutants
NH_3	Ammonia
NH_4	Ammonium
NH_4NO_3	Ammonium Nitrate
NH_4HSO_4	Ammonium Bi-Sulfate
$(NH_4)_2SO_4$	Ammonium Sulfate
NNSR	Nonattainment New Source Review
NO_X	Nitrogen Oxides
NO_3	Nitrate
NSPS	New Source Performance Standards
O_3	Ozone
OM	Organic Mass
OMB	Office of Management and Budget
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter Equal to or Less than 2.5 Microns in Diameter (Fine Particulate Matter)
PM_{10}	Particulate Matter Equal to or Less than 10 Microns in Diameter
PRA	Paperwork Reduction Act
PSD	Prevention of Significant Deterioration
RACM	Reasonably Available Control Measures
RACT	Reasonably Available Control Technology
RFP	Reasonable Further Progress
RICE	Reciprocating Internal Combustion Engines
SIP	State Implementation Plan
SOA	Secondary Organic Aerosols
SO_2	Sulfur Dioxide
SO_4	Sulfate
TAR	Tribal Authority Rule
TIP	Tribal Implementation Plan
TIP	Transportation Improvement Program
TSP	Total Suspended Particles
μm	Micrometer (Micron)
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds

B. Entities Affected by This Rule

Entities potentially affected directly by this final rule include state, local and tribal governments and air pollution control agencies responsible for attainment and maintenance of the NAAQS. Entities potentially affected indirectly by this final rule as regulated sources include owners and operators of sources that emit $PM_{2.5}$, sulfur dioxide (SO_2), oxides of nitrogen (NO_X), volatile organic compounds (VOC) and/or ammonia (NH_3). Parties affected by the conformity-related elements include state and local transportation and air quality agencies, metropolitan planning organizations (MPOs), and all federal agencies including the U.S. Department of Transportation, the U.S. Department of Defense, the U.S. Department of Interior and the U.S. Department of Agriculture. Others potentially affected indirectly by this final rule include members of the general public who live, work, or recreate in areas affected by elevated ambient $PM_{2.5}$ levels in areas designated nonattainment for a $PM_{2.5}$ NAAQS.

C. Obtaining a Copy of This Document and Other Related Information

In addition to being available in the docket, an electronic copy of this **Federal Register** document will be posted at *http://www3.epa.gov/airquality/particlepollution/actions.html.*

D. Organization of This Federal Register Document

The information presented in this document is organized as follows:

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II. Background

A. Introduction

Ambient, or outdoor, air can contain a variety of pollutants, including particulate matter (PM). Airborne PM can be comprised of either solid or liquid particles, and can be a complex mixture of particles in both solid and liquid form. The most common constituents of airborne PM include the following: Sulfate (SO_4); nitrate (NO_3); ammonium (NH_4); elemental carbon (EC); organic mass (OM); and inorganic material, generally referred to as "crustal" material, which can include metals, dust, sea salt and other trace elements. Airborne PM can be of different sizes, commonly referred to as "coarse" and "fine" particles. Fine particles, in general terms, are PM with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (µm). For this reason, particles of this size are referred to as $PM_{2.5}$. $PM_{2.5}$ particles commonly include "primary" particles and "secondary" particles. Primary particles, or direct $PM_{2.5}$, are emitted by sources directly into the air as solid or liquid particles (*e.g.,* elemental carbon from diesel engines or wildfires, or condensable organic particles from gasoline engines). Secondary particles are formed in the atmosphere as a result of chemical reactions between specific pollutants known as $PM_{2.5}$ precursors (*e.g.,* reactions between NO_X and SO_2 emissions from mobile and stationary sources combined with ammonia to form ammonium nitrate and ammonium sulfate).

The human health effects associated with long or short-term exposure to $PM_{2.5}$ are significant and include premature mortality, aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions and emergency room visits) and development of chronic respiratory disease. In addition, welfare effects associated with elevated $PM_{2.5}$ levels include visibility impairment as well as effects on sensitive ecosystems, materials damage and soiling and climatic and radiative processes.[1]

On December 14, 2012, the EPA made revisions to the suite of the NAAQS for PM to provide requisite protection of public health and welfare with an adequate margin of safety. The EPA also made corresponding revisions to the data handling conventions for PM and the ambient air monitoring, reporting and network design requirements for PM. Specifically, the agency revised the primary annual $PM_{2.5}$ standard by lowering the level from 15.0 to 12.0 µg/

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[1] For a complete discussion of the human health and welfare effects associated with exposure to elevated concentrations of particulate matter, *see generally* "Integrated Science Assessment for Particulate Matter." U.S. Environmental Protection Agency, Office of Research and Development, National Center for Environmental Assessment—RTP Division, February 10, 2010. EPA/600/R–08/139F. Available at: *http://www3.epa.gov/ttn/naaqs/standards/pm/s_pm_2007_isa.html. See* Chapter 2.

m^3 to provide increased protection against health effects associated with long- and short-term PM$_{2.5}$ exposures. The EPA did not revise the secondary annual PM$_{2.5}$ standard, which remains at 15.0 μg/m^3.[2] The EPA eliminated spatial averaging as part of the form of the PM$_{2.5}$ annual standards to avoid potential disproportionate impacts on at-risk populations. In addition, the EPA retained the level and form of the primary and secondary 24-hour PM$_{2.5}$ standards to continue to provide supplemental protection against health effects associated with short-term PM$_{2.5}$ exposures. Although not directly relevant to this rulemaking with respect to implementation of the PM$_{2.5}$ NAAQS, it should be noted that in December 2012, the EPA also did not revise the level or form of the primary and secondary 24-hour PM$_{10}$ NAAQS, which remain at 150 μg/m^3.[3]

Estimates show that attainment of the primary PM$_{2.5}$ standards will result in hundreds fewer premature deaths each year, prevent tens of thousands of hospital admissions each year and prevent hundreds of thousands of doctor visits, absences from work and school and respiratory illnesses in children annually.[4] Attainment of the primary PM$_{2.5}$ standards will have welfare co-benefits in addition to direct human health benefits. The term "welfare co-benefits" covers both environmental and societal benefits of reducing pollution, such as reductions in visibility impairment, materials damage and ecosystem damage.[5]

B. Overview of PM$_{2.5}$ NAAQS and Implementation

1. General Background

Sections 108 and 109 of the Clean Air Act (CAA or Act) govern the establishment, review and revision, as appropriate, of the NAAQS for widespread pollutants emitted from numerous and diverse sources considered harmful to public health and the environment. The CAA requires two types of NAAQS: (i) *Primary* standards, which set limits to protect public health, including the health of at-risk populations; and (ii) *secondary* standards, which set limits to protect public welfare, including protection against visibility impairment, damage to animals, crops, vegetation and buildings.

The CAA also establishes important roles both for state and tribal governments and for the EPA in implementing the NAAQS. In accordance with the principle of cooperative federalism, both state and tribal governments and the EPA have respective authorities and responsibilities under the CAA. At the outset, the EPA has the authority and responsibility to promulgate the NAAQS. In turn, state, local and tribal air pollution control agencies ("air agencies") have the authority and primary responsibility for developing and implementing attainment plans that contain emission control measures needed to achieve the air quality standards in a timely manner in each nonattainment area, consistent with the requirements of the CAA. The EPA often assists states by promulgating regulations or providing guidance for meeting implementation requirements and by providing technical tools, including information on control measures.[6] [7]

The EPA also promulgates nationally applicable control requirements and emission limits for many sources such as new motor vehicles, certain categories of new and modified major stationary sources and existing stationary sources of toxic air pollutants. These federal actions assist states by achieving emissions reductions from certain categories of sources nationwide, which can help with local attainment needs in a given nonattainment area. The EPA also has authority to provide funding, technical assistance, and guidance to states to support implementation of the NAAQS. In addition, the EPA has authority to address interstate transport of pollutants, in the event that states fail to do so. Through this authority, the EPA has addressed regional transport of pollutants from upwind states to downwind states, and has previously done so for purposes of the PM$_{2.5}$ NAAQS.[8] In addition, the EPA has the authority and responsibility to review and take action to approve or disapprove attainment plans submitted by states based upon whether they meet applicable statutory and regulatory requirements and to initiate the process for imposition of sanctions and/or issue federal implementation plans (FIPs) when states fail to fulfill their CAA obligations.

2. History of PM$_{2.5}$ NAAQS Implementation

The EPA first promulgated annual and 24-hour NAAQS for PM$_{2.5}$ in July 1997.[9] Prior to that time, the EPA had addressed ambient PM through other means, first by regulating "total suspended particles" (TSP) and then later by regulating PM$_{10}$. After protracted litigation, the 1997 NAAQS for PM$_{2.5}$ were upheld by the U.S. Court of Appeals for the District of Columbia Circuit in March 2002.[10] The EPA subsequently promulgated designations for the 1997 PM$_{2.5}$ NAAQS nationwide, designating a number of areas as nonattainment for the 1997 PM$_{2.5}$ NAAQS, effective April 2005.[11] In April 2007, the EPA issued a detailed implementation rule to assist states with the development of SIP submissions to meet attainment plan requirements for the 1997 NAAQS (the "2007 PM$_{2.5}$ Implementation Rule").[12] In May 2008, the EPA issued another rule to assist states with SIP submissions to meet the specific requirements for permitting programs for NNSR purposes in designated nonattainment areas (the "2008 PM$_{2.5}$ NSR Rule").[13] The EPA premised both the 2007 PM$_{2.5}$ Implementation Rule and the 2008 PM$_{2.5}$ NSR Rule on the EPA's interpretation of the statute that nonattainment areas for the $PM_{2.5}$ NAAQS were subject solely to the general attainment plan requirements of subpart 1, part D of title I of the CAA ("subpart 1").

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[2] 78 FR 3086 (January 15, 2013).

[3] This final rulemaking applies to implementation of the PM$_{2.5}$ NAAQS. For the PM$_{10}$ NAAQS, states and the EPA will continue to implement those NAAQS in accordance with the applicable statutory requirements of the CAA and the EPA's existing guidance in the "The General Preamble for Implementation of Title I of the Clean Air Act (CAA) Amendments," 57 FR 13498 (April 16, 1992); and "State Implementation Plans for Serious PM–10 Nonattainment Areas: Addendum to the General Preamble for the Implementation of Title I of the Clean Air Act (CAA) Amendments," 59 FR 41998 (August 16, 1994). Throughout this preamble, these documents will be referred to as the "General Preamble" and the "Addendum," respectively.

[4] "Regulatory Impact Analysis for the Final Revisions to the National Ambient Air Quality Standards for Particulate Matter." U.S. Environmental Protection Agency, Office of Air Quality and Planning Standards, Health and Environmental Impacts Division, February 28, 2013. EPA–452/R–12–005. *See http://www3.epa.gov/ttn/naaqs/standards/pm/s_pm_2007_ria.html.*

[5] *Ibid.*

[6] It is important to note that the EPA does not have a mandatory duty to promulgate an implementation rule for the PM$_{2.5}$ NAAQS, and the obligations of state and tribal air agencies to develop and submit an attainment plan are independent obligations and not conditioned upon the EPA promulgating an implementation rule for the PM$_{2.5}$ NAAQS.

[7] When the term "state" is used hereafter, it will refer generically to states, local air agencies, and tribal governments electing to be treated as states for the purposes of implementing the CAA. Of additional note is that the 1998 Tribal Authority Rule (TAR), which is found in 40 CFR part 49, which implements section 301(d) of the CAA, provides that tribes be treated in the same manner as a state when implementing certain sections of the CAA. It gives tribes the option of developing tribal implementation plans (TIPs), but unlike states, tribes are not required to develop implementation plans. Section IX.I of this preamble provides further discussion of tribal issues.

[8] *See* 76 FR 48208 (August 8, 2011).

[9] 62 FR 38652 (July 18, 1997).

[10] For a complete summary of legal challenges and related court decisions on the PM NAAQS, *see generally* 78 FR 3086 (January 15, 2013).

[11] 70 FR 944 (January 5, 2005).

[12] 72 FR 20583 (April 25, 2007).

[13] 73 FR 28231 (May 16, 2008).

Section 109(d)(1) of the CAA requires the EPA periodically to review the science upon which the standards are based and the standards themselves, and to revise the standards as may be appropriate. In October 2006, the EPA promulgated revisions to the suite of the NAAQS for PM, and in particular the EPA revised the 24-hour $PM_{2.5}$ standards.[14] In accordance with section 107(d), the EPA subsequently designated a number of areas as nonattainment for the revised 2006 24-hour $PM_{2.5}$ standards, effective December 2009.[15] In March 2012, the EPA issued a guidance document specifically to aid states in preparing their SIP submissions to meet attainment plan requirements for the 2006 24-hour $PM_{2.5}$ NAAQS in designated nonattainment areas.[16] The EPA's guidance for the 2006 $PM_{2.5}$ NAAQS was based, in large part, on the requirements finalized in the 2007 $PM_{2.5}$ Implementation Rule, which the EPA based solely upon the statutory requirements of subpart 1.

The EPA initiated a review of the $PM_{2.5}$ NAAQS in June 2007, proposing revisions to the primary and secondary $PM_{2.5}$ NAAQS on June 29, 2012.[17] The EPA issued its final rule on December 14, 2012, in which it lowered the primary annual $PM_{2.5}$ standard from 15.0 $\mu g/m^3$ to 12.0 $\mu g/m^3$ to provide increased protection against health effects associated with long- and short-term fine particle exposures.[18] The EPA also eliminated spatial averaging as part of the form of the annual standard to avoid potential disproportionate impacts on at-risk populations.[19] The EPA retained the level (35 $\mu g/m^3$) and form (98th percentile, averaged over 3 years) of the primary 24-hour $PM_{2.5}$ standard, as revised in 2006, to provide supplemental protection against health effects associated with short-term $PM_{2.5}$ exposures, especially in areas with high peak $PM_{2.5}$ concentrations.[20] This suite of primary $PM_{2.5}$ standards provides increased public health protection, including the health of at-risk populations which include children, older adults, persons with pre-existing health and lung disease and persons of lower socioeconomic status, against a broad range of $PM_{2.5}$-related effects that include premature mortality, increased hospital admissions and emergency department visits and development of chronic respiratory disease.[21] With regard to the secondary (welfare-based) standards, the EPA retained the existing annual $PM_{2.5}$ standard of 15.0 $\mu g/m^3$ and the existing 24-hour $PM_{2.5}$ standard of 35 $\mu g/m^3$ to protect against PM-related non-visibility welfare effects including ecological effects, effects on materials and climate impacts. In addition, the secondary 24-hour $PM_{2.5}$ standard provides protection for PM-related visibility impairment.

On January 4, 2013, shortly after the EPA promulgated the 2012 revisions to the suite of PM NAAQS, the D.C. Circuit issued its decision in a challenge to the 2007 $PM_{2.5}$ Implementation Rule and the 2008 $PM_{2.5}$ NSR Rule. In *NRDC* v. *EPA*, the court held that the EPA erred in implementing the 1997 $PM_{2.5}$ NAAQS pursuant only to the general implementation requirements of subpart 1, rather than also to the implementation requirements specific to particulate matter (PM_{10}) in subpart 4, part D of title I of the CAA ("subpart 4").[22] The court reasoned that the plain meaning of the CAA requires implementation of the 1997 $PM_{2.5}$ NAAQS under subpart 4 because $PM_{2.5}$ particles fall within the statutory definition of PM_{10} and thus implementation of the $PM_{2.5}$ NAAQS is subject to the same statutory requirements as the PM_{10} NAAQS. In addition, although the court stated that its decision that the EPA must implement the $PM_{2.5}$ NAAQS pursuant to subpart 4 requirements meant that it did not have to reach decisions on other issues concerning the regulation of precursors to $PM_{2.5}$, the court nonetheless noted that subpart 4 has specific requirements with respect to regulation of such precursors. As a result, the court remanded to the EPA both the 2007 $PM_{2.5}$ Implementation Rule and the 2008 $PM_{2.5}$ NSR Rule, both of which were premised on the EPA's interpretation of the statute that subpart 1 was the only applicable subpart for the implementation of the 1997 $PM_{2.5}$ NAAQS in nonattainment areas. The court instructed the EPA "to repromulgate these rules pursuant to subpart 4 consistent with this opinion." Given the D.C. Circuit's opinion in *NRDC* v. *EPA*, the EPA withdrew its 2012 guidance document for the 2006 24-hour $PM_{2.5}$ NAAQS in June 2013. Because the court had concluded that the EPA and states must implement the $PM_{2.5}$ NAAQS consistent with the statutory requirements of subpart 4, the EPA's 2012 guidance for attainment plans for the 2006 $PM_{2.5}$ NAAQS premised solely upon subpart 1 requirements was no longer appropriate.

The EPA issued a notice of proposed rulemaking (NPRM) on March 23, 2015 (80 FR 15340) titled, "Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements" ($PM_{2.5}$ SIP Requirements Rule) to meet a number of objectives. This final rule accomplishes those objectives. It clarifies how states should meet the statutory SIP requirements that apply to areas designated nonattainment for any $PM_{2.5}$ NAAQS under subparts 1 and 4. It does so by establishing regulatory requirements and providing guidance that will be applicable to attainment plans for the 2012 $PM_{2.5}$ NAAQS and any future revisions of the $PM_{2.5}$ NAAQS, subject to revisions that may be necessary for implementation purposes in the future. In addition, this action responds to the D.C. Circuit's remand of the 2007 $PM_{2.5}$ Implementation Rule and the 2008 $PM_{2.5}$ NSR Rule. As a result, the requirements of the rule will also govern future actions associated with states' ongoing implementation efforts for the 1997 and 2006 $PM_{2.5}$ NAAQS.

The public comment period for the proposed $PM_{2.5}$ SIP Requirements Rule closed on May 29, 2015, and the EPA received 56 comments during that period. The preamble to this final rule includes discussion of the most significant comments received on the proposal and how the EPA considered them in developing the agency's final action concerning the specific nonattainment planning requirements. The Response to Comments document that accompanies this final rule provides more detailed responses to the significant comments received. The public comments received on the NPRM and the EPA's Response to Comment document are posted in the docket at *http://www.regulations.gov* (Docket ID No. EPA–HQ–OAR–2013–0691).

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[14] 71 FR 61144 (October 17, 2006).

[15] 74 FR 58688 (November 13, 2009).

[16] Memorandum of March 2, 2012 (withdrawn June 6, 2013), from Stephen D. Page, Director, Office of Air Quality Planning and Standards, to the EPA Regional Air Directors, Regions I–X, "Implementation Guidance for the 2006 24-Hour Fine Particle ($PM_{2.5}$) National Ambient Air Quality Standards (NAAQS)." Available at: *http://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20120302_page_implement_guidance_2006-24-hr_pm2.5_naaqs.pdf.*

[17] 77 FR 38890 (June 29, 2012).

[18] 78 FR 3086 (January 15, 2013).

[19] Spatial averaging of monitored ambient air quality data was a feature of the prior $PM_{2.5}$ NAAQS monitoring regulations which had the potential for masking particularly high $PM_{2.5}$ concentrations at certain monitored locations within nonattainment areas.

[20] 71 FR 61144 (October 17, 2006).

[21] General information regarding the health effects associated with $PM_{2.5}$ exposures is available at: *http://www3.epa.gov/airquality/particlepollution/health.html.* Additional information, such as the EPA's technical documents supporting the latest review of the standards, is available at: *http://www.epa.gov/ttn/naaqs/standards/pm/s_pm_index.html.*

[22] *NRDC* v. *EPA,* 706 F.3d 428 (D.C. Cir. 2013).

C. Atmospheric Chemistry of $PM_{2.5}$ and Its Precursors

1. Overview

In order to determine how to regulate sources of direct $PM_{2.5}$ and $PM_{2.5}$ precursors to attain the $PM_{2.5}$ NAAQS in a given nonattainment area, it is necessary to understand the basic chemical processes that cause or contribute to the formation of ambient $PM_{2.5}$. Accordingly, an understanding of these processes is necessary to design appropriate regulations for implementation of the $PM_{2.5}$ NAAQS.

As noted earlier, the term $PM_{2.5}$ refers to particles of solid and liquid material less than 2.5 microns in aerodynamic diameter.[23] "Primary" $PM_{2.5}$ is emitted directly from emissions sources or activities, such as from diesel fuel combustion, wood burning, construction activities, and unpaved roads, and it includes both filterable and condensable particles.[24] "Secondary" $PM_{2.5}$ is formed as a result of emissions of certain precursor gases that undergo chemical reactions in the atmosphere. The principal precursor gases that contribute to secondary $PM_{2.5}$ formation are SO_2, from the combustion of coal or other high sulfur fuels; NO_X, from many types of fossil fuel combustion; VOC, from certain fuels, solvents and industrial processes; and ammonia, from sources such as animal feeding operations, wastewater treatment and fertilizer. To illustrate the types of sources that emit relevant pollutants, Table 1 provides National Emissions Inventory (NEI) data for 2011 that represent nonattainment area anthropogenic and wildfire emissions estimates for direct $PM_{2.5}$ and the four main $PM_{2.5}$ precursor gases from major source sectors.

TABLE 1—TOTAL EMISSIONS OF $PM_{2.5}$ AND PRECURSORS FOR MAJOR SECTORS IN $PM_{2.5}$ NONATTAINMENT AREAS[a]

[In tons/year]

Source: 2011 National Emissions Inventory (Version 2)[b]

Category	Direct $PM_{2.5}$	SO_2	NO_X	VOC	NH_3
Fuel combustion, electric generating utilities (EGUs)	11,339	324,658	82,509	3,001	3,572
Fuel combustion, industrial	10,286	23,762	57,690	6,251	892
Fuel combustion, other	29,582	8,224	60,636	32,320	8,819
Chemical and allied products	1,504	1,329	1,056	2,828	685
Metals processing	4,037	19,490	4,543	4,586	130
Petroleum and related industries	1,534	7,273	3,775	18,830	215
Other industrial processes	24,168	8,466	22,599	24,928	1,094
Solvent utilization	1,089	39	56	242,022	68
Storage and transport	3,420	628	7,067	55,410	3,684
Waste disposal and recycling	4,143	830	4,130	16,492	19,389
Onroad mobile	21,073	2,598	540,800	234,136	17,525
Offroad mobile	13,660	5,874	239,169	152,504	150
Miscellaneous (includes emissions from fire,[c] dust and some agricultural operations)	158,565	7,368	13,734	248,835	236,577
Total	284,401	410,540	1,037,764	1,042,144	292,800

[a] There were 33 areas designated as nonattainment for the 1997, 2006, or 2012 $PM_{2.5}$ NAAQS as of June 6, 2016. These areas were comprised of 67 whole or partial counties. The emissions data in this table represents whole county emissions for the 67 counties because such data is readily available in EPA databases. Actual emissions totals for the 33 nonattainment areas in aggregate would be somewhat lower because some nonattainment areas include partial counties.

[b] For more details on the definitions of the emission categories listed in Table 1, *see* Sector/Tier crosswalk table for the 2011 NEI, available at: *ftp://ftp.epa.gov/EmisInventory/2011/doc/scc_eis_crosswalk_2011neiv1.xlsx.*

[c] Emissions from fire include wildfire, prescribed fire, and agricultural burning.

2. Composition and Sources of $PM_{2.5}$ Constituents

$PM_{2.5}$ is a complex and highly variable mixture of particles, but the majority of $PM_{2.5}$ by mass is often comprised of five constituents: (i) OM; (ii) EC; (iii) crustal material; (iv) ammonium sulfate ($(NH_4)_2SO_4$); and (v) ammonium nitrate (NH_4NO_3).[25] The discussion that follows provides an overview of each of the five major components of $PM_{2.5}$, all of which are known to contribute to ambient $PM_{2.5}$ levels in areas throughout the U.S.[26] Section II.C.3.d of this preamble provides more details on the atmospheric chemistry involved in the formation of sulfate, nitrate and OM, to illustrate the importance of controlling emissions of $PM_{2.5}$ precursors as part of any comprehensive strategy to reduce ambient $PM_{2.5}$ levels in excess of the NAAQS. Section II.C.4 of this preamble presents a brief overview of $PM_{2.5}$ composition by region of the U.S.

OM is the fraction of ambient $PM_{2.5}$ with the most diverse chemical composition, containing potentially thousands of different organic compounds (*i.e.*, those compounds containing carbon) composed primarily of carbon, hydrogen, oxygen and nitrogen. Both primary particles and secondary particles contribute to ambient OM concentrations, with combustion sources being the dominant type of emissions sources. Another portion of primary OM particles results from direct emissions of organic compounds from sources of incomplete combustion, such as gas and diesel engines. Secondary OM particle formation involves oxidation of both anthropogenic and biogenic (plant-derived) VOC, and can involve other, more complex chemical reactions. Further details of the chemistry behind the formation of secondary OM, known more commonly as secondary organic aerosols (SOA), are described in Section II.C of this preamble.

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[23] The regulatory definition of $PM_{2.5}$ includes particles with an upper 50 percent cut-point of 2.5μm aerodynamic diameter (the 50 percent cut-point diameter is the diameter at which the sample collects 50 percent of the particles and rejects 50 percent of the particles). $PM_{2.5}$ particles have a penetration curve as measured by a reference method based on Appendix L of 40 CFR part 50 and designated in accordance with 40 CFR part 53, by an equivalent method designed in accordance with 40 CFR part 53, or by an approved regional method designated in accordance with Appendix C of 40 CFR part 58.

[24] Certain commercial or industrial activities involving high temperature processes (*e.g.*, fuel combustion, metal processing, cooking operations) emit gaseous pollutants into the ambient air that rapidly condense into particle form. These "condensable" PM emissions exist almost entirely in the 2.5 or less micron range and can consist of organic material, sulfuric acid and metals.

[25] Seinfeld J.H. and Pandis S.N., 2006. *Atmospheric Chemistry and Physics: From Air Pollution to Climate Change.* 2nd edition, J. Wiley, New York.

[26] U.S. Environmental Protection Agency, 2004. "The Particle Pollution Report: Current Understanding of Air Quality and Emissions through 2003." Office of Air Quality Planning and Standards, Emissions, Monitoring, and Analysis Division, December 2004. Available at: *http://www.epa.gov/airtrends/reports.html.*

EC refers to particulate carbon that has a graphitic molecular structure, and is sometimes referred to as "black carbon" (BC). It is emitted directly from emission sources and does not undergo any significant reactions with other gases in the atmosphere. EC particles result from primary emissions involving combustion, especially from diesel-fueled vehicles, but also from other processes involving the burning of fossil fuels. The latter include anthropogenic sources such as boilers and waste disposal. In addition, some EC particles originate from biomass combustion such as from prescribed fires, wildfires and residential wood combustion.

Crustal PM is comprised of particles of soil and oxides of metals from some industrial processes. Compounds comprised of elements such as silicon, aluminum, iron, calcium, titanium, magnesium and potassium, as well as oxygen, are major components.[27] Sources of crustal $PM_{2.5}$ include windblown dust, dust from mechanical resuspension (*e.g.* dust from construction activities or vehicles driving on unpaved roads) and some forms of combustion, especially of coal. Crustal $PM_{2.5}$ comprised of elements, like iron (Fe), and their oxides can also be emitted from industrial sources.

The remaining portion of ambient $PM_{2.5}$ is mostly composed of SO_4, NO_3 and NH_4, which react in the ambient air to form ammonium sulfate ($(NH_4)_2SO_4$) and ammonium nitrate (NH_4NO_3). Another common $PM_{2.5}$ particle is ammonium bi-sulfate (NH_4HSO_4). In some areas, less common ions such as chloride are also found in $PM_{2.5}$ samples in the form of particles that include sodium chloride and ammonium chloride. Particle-bound water is often also associated with this fraction of $PM_{2.5}$. Sulfate, nitrate and ammonium particles originate through both primary and secondary mechanisms, although the vast majority of these $PM_{2.5}$ particles are formed through secondary formation, as described in the following section.

3. Secondary Formation of $PM_{2.5}$ From Gaseous Precursors

a. Overview. The composition of $PM_{2.5}$ is complex and highly variable due in part to the large contribution of secondary $PM_{2.5}$ to total fine particle mass in most locations, and to the complexity of secondary particle formation processes. A large number of possible chemical reactions, often non-linear in nature, can convert the gases SO_2, NO_X, VOC and ammonia to $PM_{2.5}$. Thus, these gases are precursors to $PM_{2.5}$. A brief discussion of SO_4, NO_3 and SOA formation, as well as the role of ammonia in their formation, follows.

b. SO_4 Formation. SO_2 is emitted mostly from the combustion of fossil fuels in boilers operated by electric utilities and other industries, with less than 10 percent of SO_2 emissions nationwide currently coming from other industrial sources, such as oil refining and pulp and paper production.[28] When SO_2 oxidizes it forms sulfuric acid, a highly corrosive compound toxic to humans and to ecosystems that contributes to acid deposition (acid rain). In the presence of ammonia, however, sulfuric acid will react to form $(NH_4)_2SO_4$, a less acidic compound and one of the five major components of $PM_{2.5}$. If there is not enough ammonia present to fully neutralize the sulfuric acid, part of it may convert to NH_4HSO_4, which is more acidic than $(NH_4)_2SO_4$, but less so than sulfuric acid. There is a large amount of emerging scientific evidence that SO_2 may also contribute to the formation of SOA from biogenic VOC emissions (*see* section later on SOA). Sulfate levels in the ambient air peak in summer months due to increased SO_2 emissions, generally from electric generating units (EGUs), and from meteorological conditions that are conducive to sulfate formation.

c. NO_3 Formation. The main sources of NO_X emissions are combustion of fossil fuel in boilers and mobile sources, accounting for more than 80 percent of national anthropogenic NO_X emissions (based on the 2011 NEI), with boilers and EGUs contributing about 27 percent and mobile sources contributing 56 percent. Oxides of nitrogen react in the atmosphere to form nitric acid, another prime contributor to acid deposition in the environment. Nitric acid converts to ammonium nitrate, one of the five main components of $PM_{2.5}$, in the presence of ammonia. Low temperatures and high relative humidity create ideal conditions for the formation of ammonium nitrate, typically leading to higher atmospheric levels in winter months and lower levels in summer months.[29]

d. SOA Formation. As discussed earlier, the OM component of ambient $PM_{2.5}$ is a complex mixture of hundreds or even thousands of anthropogenic and biogenic organic compounds. These compounds are either emitted directly from sources (*i.e.*, as "primary" $PM_{2.5}$) or formed by reactions in the ambient air to make SOA (*i.e.*, as "secondary" $PM_{2.5}$).

VOC (both anthropogenic and biogenic) are key precursors to the SOA component of $PM_{2.5}$. The relative importance of these compounds in the formation of organic particles varies between geographic areas, depending upon local emission sources, atmospheric chemistry and season of the year. It should be further noted that not all inventoried VOC may be contributing to the formation of organic particles. For example, chemical reactions involving VOC are generally accelerated in warmer temperatures, and for this reason studies show that SOA typically comprises a higher percentage of $PM_{2.5}$ in the summer than in the winter.[30]

Anthropogenic sources of VOC include mobile sources, petrochemical manufacturing, oil and gas emissions, fire emissions, and solvents.[31] In addition, some biogenic VOC, emitted by vegetation such as trees, can also contribute significantly to SOA formation, especially in heavily forested areas, such as the southeastern U.S. It should be noted, however, that anthropogenic contributions to SOA are likely highest in the wintertime when biogenic SOA levels are lower; conversely, in the summertime, biogenic contributions to SOA are likely higher. Despite significant progress that has been made in understanding the origins and properties of SOA, it remains the least understood component of $PM_{2.5}$ and continues to be a significant topic of research and investigation.

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[27] Appel, K.W., Pouliot, G.A., Simon, H., Sarwar, G., Pye, H.O.T., Napelenok, S.L., Akhtar, F., and Roselle, S.J., 2013. Evaluation of dust and trace metal estimates from the Community Multiscale Air Quality (CMAQ) model version 5.0, Geoscientific Model Development Discussions 61859–1899; Sorooshian, A., Shingler, T., Harpold, A., Feagles, C.W., Meixner, T., and Brooks, P.D., 2013. Aerosol and precipitation chemistry in the southwestern United States: spatiotemporal trends and interrelationships, Atmospheric Chemistry and Physics 13, 7361–7379.

[28] U.S. Environmental Protection Agency, 2013. "2008 National Emissions Inventory: Review Analysis and Highlights." Office of Air Quality Planning and Standards, Air Quality Assessment Division, May 2013. EPA–454/R–005. Available at: *https://www.epa.gov/sites/production/files/2015-07/documents/2008report.pdf.*

[29] Carlton, A.G., Pinder, R.W., Bhave, P.B., Pouliout, G.A., 2010. To What Extent Can Biogenic SOA Be Controlled, Environmental Science and Technology 44(9), 3376–80.

[30] Pandis S.N., Harley R.A., Cass G.R., and Seinfeld J.H., 1992. Secondary Organic Aerosol Formation and Transport, Atmospheric Environment, 26, 2266–82.

[31] Carlton, A.G., Bhave, P.B., Napelenok, S.L., Edney, E.O., Sarwar, G., Pinder, R.W., Pouliout, G.A., and Houyoux, M. (2010), Model Representation of Secondary Organic Aerosol in CMAQ4.7, Environmental Science and Technology 44(22), 8553–60.

e. Role of Ammonia in Sulfate, Nitrate and SOA Formation. Ammonia is a gaseous pollutant emitted by natural and anthropogenic sources. The EPA's 2011 NEI shows that the two main sources of ammonia emissions are fertilizer application (27 percent) and livestock raising (54 percent). It should be noted that the 2011 NEI indicates that mobile sources in the aggregate contribute about 3 percent of nationwide ammonia emissions. Catalytic converters installed on light-duty gasoline vehicles are designed to convert NO_X to nitrogen (N_2); however, some ammonia is formed as a secondary product and emitted during this process.

As indicated earlier, ammonia plays an important role in neutralizing acids, such as sulfuric acid and nitric acid, in clouds, precipitation and particles. On the other hand, deposited ammonia can contribute to problems of eutrophication in water bodies due to its nutritive properties.[32] Ammonia would not exist in particles if not for the presence of acidic species with which it can combine to form a particle. In the eastern U.S., sulfate, nitrate and the ammonium associated with them can together account for between roughly 30 percent and 75 percent of the total $PM_{2.5}$ mass in a given area. The ammonium portion by itself roughly accounts for between 5 percent and 20 percent of the total $PM_{2.5}$ mass in the East.[33]

f. Role of NO_X in Nitrate and SOA Formation. In addition to the contribution of NO_X emissions to secondary particulate nitrate formation, NO_X also reacts with anthropogenic and biogenic VOC to enhance the secondary formation of organic compounds that make up SOA. NO_X is thus involved in all secondary PM chemistry, not just in particulate nitrate formation.[34]

4. Fine Particulate Composition by Location.

Table 2 shows regional 3-year mean concentrations (2009–2011) of $PM_{2.5}$ and its main components at sites in the Chemical Speciation Network (CSN).[35] In addition to the mean values for all sites in each region, the table includes the minimum and maximum observed $PM_{2.5}$ and species concentrations for sites within each region. These data illustrate broad observed spatial patterns across the U.S. in $PM_{2.5}$ concentrations and its composition. For example, $PM_{2.5}$ concentrations are highest on average in the Central and West regions. Sulfate mass comprises a larger fraction of $PM_{2.5}$ than nitrate mass in the northeastern U.S., whereas nitrate has a greater contribution than sulfate in the West. OM is the dominant component in all regions, with the highest concentrations of OM on average found in the West, Northwest and Southeast. On a percentage basis, the concentrations of EC and crustal material are relatively low throughout all regions of the U.S. compared to the other major $PM_{2.5}$ components.

The composition of $PM_{2.5}$ also varies between urban and rural areas. This is reflective of the distribution of urban and regional emission sources, atmospheric reactions and transport of fine particles. More details about the spatial distribution and origins of $PM_{2.5}$ components can be found in the docket for this action.[36]

TABLE 2—$PM_{2.5}$ CHEMICAL COMPOSITION DATA AT 2009–2011 NONATTAINMENT SITES

[Source: EPA Speciation Trends Network]

Region	Statistic	Concentration (µg/m^3)					
		Sulfate	Nitrate	OM	EC	Crustal	$PM_{2.5}$
Central	Min (µg/m^3)	1.46	0.3	2.73	0.31	0.01	8.92
	Mean (µg/m^3)	2.69	1.49	3.57	0.68	0.26	11.63
	Max (µg/m^3)	4.19	3.34	4.81	1.1	1.0	13.51
	N	61	61	50	50	61	42
East North Central	Min (µg/m^3)	0.83	0.38	1.97	0.19	0.01	6.03
	Mean (µg/m^3)	1.68	1.8	2.84	0.48	0.19	9.86
	Max (µg/m^3)	2.51	3.57	3.69	0.79	0.61	11.87
	N	29	28	20	20	28	23
North East	Min (µg/m^3)	0.58	0.12	1.74	0.14	0	4.42
	Mean (µg/m^3)	2.06	0.97	3.14	0.69	0.17	9.33
	Max (µg/m^3)	5.12	2.26	5.05	1.69	0.52	15.05
	N	59	59	39	39	59	46
North West	Min (µg/m^3)	0.24	0.05	2.91	0.42	0.01	6.06
	Mean (µg/m^3)	0.54	0.4	5.02	0.81	0.15	8.33
	Max (µg/m^3)	1.09	1.79	8.44	1.25	0.53	10.96
	N	33	33	13	13	33	14
South	Min (µg/m^3)	0.88	0.18	1.36	0.12	0.02	5.22
	Mean (µg/m^3)	2.06	0.8	3.32	0.57	0.5	10.05
	Max (µg/m^3)	3.08	1.67	5.1	1.48	2.38	14.27
	N	36	27	23	23	36	23
South East	Min (µg/m^3)	1.6	0.2	1.75	0.37	0.01	6.76
	Mean (µg/m^3)	2.39	0.53	4.12	0.63	0.26	10.77

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[32] Seinfeld, J.H. and Pandis, S.N. (1998), *Atmospheric Chemistry and Physics: From Air Pollution to Climate Change,* 1st edition, J. Wiley, New York.

[33] NARSTO, 2003. Particulate Matter Science for Policy Makers. A NARSTO Assessment. Parts 1 and 2. NARSTO. Management Office (Envair), Pasco, Washington. Available at: *http://narsto.org/pm_science_assessment.*

[34] Carlton, A.G., Pinder, R.W., Bhave, P.B., and Pouliout, G.A., 2010. To what extent can Biogenic SOA be Controlled, Environmental Science and Technology 44(9), 3376–3380.

[35] The organic matter (OM) values in Table 2 were calculated by multiplying the measured organic carbon (OC) concentrations by 1.6 (Turpin and Lim (2001), Aerosol Science and Technology, 35, 602–610). $PM_{2.5}$ concentrations come from measurements of the Federal Reference/Equivalance Methods (FRM/FEM) rather than from the CSN $PM_{2.5}$ measurement.

[36] Reff and Rao, Memo to the docket, 2013.

TABLE 2—PM$_{2.5}$ CHEMICAL COMPOSITION DATA AT 2009–2011 NONATTAINMENT SITES—Continued

[Source: EPA Speciation Trends Network]

Region	Statistic	Concentration (µg/m^3)					
		Sulfate	Nitrate	OM	EC	Crustal	PM$_{2.5}$
	Max (µg/m^3)	4.33	1.51	5.71	1.2	0.85	13.38
	N	44	43	30	30	43	29
South West	Min (µg/m^3)	0.34	0.07	2.34	0.46	0.02	5.3
	Mean (µg/m^3)	0.63	0.49	3.01	0.7	0.5	7.93
	Max (µg/m^3)	1.13	2.65	4.39	1.04	1.96	9.73
	N	46	46	11	11	46	12
West	Min (µg/m^3)	0.33	0.08	1.79	0.52	0.01	6.84
	Mean (µg/m^3)	0.9	1.4	5.22	0.85	0.32	11.49
	Max (µg/m^3)	2.08	5.14	10.27	1.56	1.05	16.57
	N	44	44	20	20	44	21
West North Central	Min (µg/m^3)	0.29	0.06	1.22	0.09	0	3.23
	Mean (µg/m^3)	0.67	0.48	3.16	0.44	0.22	7.25
	Max (µg/m^3)	1.79	2.02	8.28	1.21	0.53	13.72
	N	30	30	7	7	30	10

III. Requirements With Respect to the Treatment of PM$_{2.5}$ Precursors in Attainment Plans and the NNSR Program

A. Background

The EPA recognizes that the treatment of PM$_{2.5}$ precursors is an important issue in developing a PM$_{2.5}$ attainment plan[37] or implementing the NNSR program in a nonattainment area. The EPA has long recognized the scientific basis for concluding that there are multiple scientific precursors to PM$_{10}$[38]and PM$_{2.5}$.[39] Appropriate control of precursors is especially important for attaining the PM$_{2.5}$ NAAQS because secondarily formed particles (such as ammonium nitrate, ammonium sulfate, and some portion of organic carbon) comprise a large fraction of ambient PM$_{2.5}$ concentrations in many nonattainment areas. However, in some PM$_{2.5}$ nonattainment areas, a particular precursor or precursors may not contribute significantly to PM$_{2.5}$ levels that exceed the relevant NAAQS. This section of the preamble describes optional precursor demonstrations that a state may choose to submit to the EPA in order to establish that sources of particular precursors need not be regulated for purposes of attainment planning or in the NNSR permitting program for a specific nonattainment area.

Section III.A of this preamble provides background on the January 2013 *NRDC* v. *EPA* court decision, in which the court found that subpart 4 of part D of the CAA presumptively requires regulation of all PM$_{2.5}$ precursors, except under certain circumstances. Section III.A of this preamble also provides information on the requirements of the subpart 4 provisions applicable to attainment plans for PM NAAQS. Section III.B of this preamble provides a summary of the precursor demonstration options in the proposed rule and comments received. Section III.C of this preamble provides a discussion of the optional precursor demonstrations provided in the final rule.

The final rule describes how in some cases a state may demonstrate that the adoption of additional emission reduction measures for a particular precursor is not needed for purposes of achieving expeditious attainment nor for advancing the attainment date by at least a year in a nonattainment area. (This is referred in the preamble as an "expeditious attainment demonstration.") The rule also describes three optional approaches for demonstrating that a particular precursor is not a significant contributor to ambient PM$_{2.5}$ levels that exceed the standard in a particular nonattainment area. These three precursor demonstrations are: (a) Comprehensive precursor demonstration; (b) major stationary source precursor demonstration; and (c) NNSR precursor demonstration. If a state chooses to submit a precursor demonstration, it must do so in accordance with provisions in the final rule. A state may use this type of demonstration to justify that sources of the given precursor may be excluded from certain PM$_{2.5}$ attainment plan requirements and/or NNSR requirements, although the particular sources and requirements eligible for exclusion will depend on the type of demonstration submitted.

Section III.C of this preamble also outlines certain technical issues, such as the appropriate geographic scope of a precursor demonstration, recommended significance thresholds, and recommended analytical approaches for evaluating precursor contributions to ambient PM$_{2.5}$ levels and the sensitivity of PM$_{2.5}$ levels in an area to decreases or increases of emissions.

January 2013 court decision in NRDC v. *EPA*. As explained in the proposed rule, the EPA's approach to the evaluation and regulation of PM$_{2.5}$ precursors pursuant to subpart 1 in both the 2007 PM$_{2.5}$ Implementation Rule and the 2008 PM$_{2.5}$ NSR Rule was invalidated in the court's 2013 decision in *NRDC* v. *EPA*. As an example of the distinction between the divergent substantive requirements of subpart 1 and subpart 4 of part D of the CAA, the court noted that subpart 4 has specific provisions related to regulation of precursors not present in subpart 1. Although the court stated that it was not reaching a decision on the issue of regulation of precursors, the court's opinion specifically discussed the approach to precursors in both the 2007 PM$_{2.5}$ Implementation Rule and the 2008 PM$_{2.5}$ NSR Rule and compared that approach to section 189(e) of the CAA, which contains the sole explicit reference to the regulation of precursors in subpart 4. The court decision included the following statements with regard to precursors:

> Ammonia is a precursor to fine particulate matter, making it a precursor to both PM$_{2.5}$

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[37] Note that in this document the term "attainment plan" refers to a state's required SIP submittal elements other than those elements related to the NNSR program.

[38] *See* the General Preamble, 57 FR 13498, (April 16, 1992).

[39] *See* 2007 PM$_{2.5}$ Implementation Rule, 72 FR 20586 (April 25, 2007). The rule discussed the fact that emissions of SO$_2$, NO$_X$, VOC and ammonia are factual and scientific precursors to PM$_{2.5}$.

> and PM_{10}. For a PM_{10} nonattainment area governed by subpart 4, a precursor is presumptively regulated. *See* 42 U.S.C. 7513a(e) [CAA section 189(e)]. Under the PM rules challenged here, the EPA established a rebuttable presumption against regulating ammonia unless a state or the EPA "provides an appropriate technical demonstration" that shows emissions from ammonia "significantly contribute to PM concentration in the nonattainment area." 40 CFR 51.1002(c)(4)(i). When Congress enacted subpart 4, it sought to end this administrative gamesmanship.[40]

The court continued to hold that "[i]n light of our disposition, we need not address the petitioners' challenge to the presumptions in 40 CFR 51.1002(c)(3)–(4) that volatile organic compounds and ammonia are not $PM_{2.5}$ precursors, as subpart 4 expressly governs precursor presumptions."[41]

Section 189(e) of the CAA establishes requirements for precursors to PM_{10} (which the court concluded expressly includes $PM_{2.5}$) and provides that: "The control requirements applicable under plans in effect under this part for major stationary sources of PM_{10} shall also apply to major stationary sources of PM_{10} precursors, except where the Administrator determines that such sources do not contribute significantly to PM_{10} levels which exceed the standard in the area." The court reasoned that the EPA's approach to precursors in the 2007 $PM_{2.5}$ Implementation Rule and 2008 $PM_{2.5}$ NSR Rule had the effect of reversing the presumption embodied within subpart 4 that a state should address all PM_{10} precursors unless the state has made a specific showing why regulation of a particular precursor is not necessary.

Subpart 4 of part D of the CAA. The provisions of subpart 4 (CAA sections 188–190) do not define the term "precursor" for purposes of PM_{10}, nor do they explicitly require the control of any specifically identified PM precursor. However, the statutory definition of "air pollutant" provides that the term "includes any precursors to the formation of any air pollutant, to the extent the Administrator has identified such precursor or precursors for the particular purpose for which the term 'air pollutant' is used." *See* CAA section 302(g). The EPA has determined that SO_2, NO_X, VOC and ammonia are factual and scientific precursors to PM and, thus, the attainment plan requirements of subpart 4 apply equally to emissions of direct $PM_{2.5}$ and these precursors in $PM_{2.5}$ nonattainment areas, except as otherwise provided in the statute. Section 189(e) of the CAA explicitly requires the control of precursors from all major stationary sources in $PM_{2.5}$ nonattainment areas unless there is a demonstration to the satisfaction of the Administrator that such major stationary sources do not contribute significantly to PM levels that exceed the standards in the nonattainment area.[42] Section 189(e) of the CAA contains the only express exception to control requirements for PM precursors under subpart 4.

When Congress adopted the 1990 CAA Amendments, the NAAQS for PM_{10} was in effect, but no standard for $PM_{2.5}$ had yet been established. At that time, it was understood that the interaction of PM_{10} precursors in the atmosphere led to the formation of PM_{10} in many areas. However, in some of the PM_{10} nonattainment areas, air quality problems were caused primarily by area sources emitting direct PM emissions (*e.g.,* a nonattainment area with numerous wood burning devices, or with substantial sources of windblown coarse particles from construction sites), and precursor emissions from major stationary sources were not considered to make a significant contribution to the local nonattainment problem. For cases such as these, CAA section 189(e) provided a possible exception to the requirement to control all PM_{10} precursors from major sources in a particular nonattainment area.

Consistent with past practice for implementation of the PM_{10} NAAQS, the EPA proposed to interpret the control requirements addressed by CAA section 189(e) to include RACM/RACT (and additional reasonable measures) for Moderate nonattainment areas, BACM/BACT (and additional feasible measures) for Serious nonattainment areas, most stringent measures (MSM) (for Serious areas as applicable) and NNSR on all major sources of precursors in the nonattainment areas. The General Preamble indicates that consideration of precursors is necessary for attainment plans, and it recognizes the specific applicability of CAA section 189(e) to both existing and new major stationary sources, including new and modified sources subject to NNSR permitting requirements. Even though CAA section 189(e) only explicitly contemplates exceptions to control requirements for $PM_{2.5}$ precursors from major stationary sources in nonattainment areas, the EPA believes that by analogy it has authority to promulgate regulations that allow states to determine that it is not necessary to regulate $PM_{2.5}$ precursors from other sources in nonattainment areas as well, under appropriate circumstances.

While CAA section 189(e) expressly requires control of precursors from major stationary sources, it is clear that subpart 4 and other CAA provisions collectively require the control of direct $PM_{2.5}$ and all $PM_{2.5}$ precursors from all types of sources (*i.e.,* stationary sources, area sources, and mobile sources) as may be needed for the purposes of demonstrating attainment as expeditiously as practicable in a given nonattainment area.[43] Longstanding EPA guidance for RACM has indicated that the state should inventory all emissions of the relevant pollutants and precursors in the nonattainment area, evaluate the available control measures for the relevant pollutant and precursors to determine if such controls are economically and technologically feasible, and then adopt those measures that are deemed reasonably available and necessary in order to attain the NAAQS as expeditiously as practicable.[44] The EPA guidance has also long indicated that the state must ensure that there is no other collection of available control measures that if adopted would advance the attainment date by at least 1 year.[45] Section IV.D of this preamble provides additional discussion on the development of emissions inventories and the identification, adoption and implementation of reasonably available control measures for $PM_{2.5}$ nonattainment areas, including a discussion particular to wildfire and wildland prescribed fire found in Section IV.D.3.b.[46]

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[40] *NRDC* v. *EPA,* 706 F.3d 428, 437, n.7 (D.C. Cir. 2013).

[41] *NRDC* v. *EPA,* 706 F.3d 428, 437, n.10 (D.C. Cir. 2013).

[42] The EPA notes that it previously had addressed the requirements of subpart 4 for precursors, specifically within the context of the requirements of CAA section 189(e), in the General Preamble. *See* the **Federal Register** published on April 16, 1992 (57 FR 13498, 13539, 13541 and 13542).

[43] *See* CAA requirements for states to demonstrate attainment "as expeditiously as practicable" (CAA section 188(c)(1); CAA section 172(a)(2)).

[44] 57 FR 13498 (April 16, 1992).

[45] In the context of the PM_{10} NAAQS, the EPA has concluded that "advancement of the attainment date" should mean an advancement of at least 1 calendar year. *See* State Implementation Plans; General Preamble for the Implementation of Title I of the CAA Amendments of 1990, 57 FR 13498 (April 16, 1992). *See also Sierra Club* v. *EPA,* 294 F.3d 155 (D.C. Cir. 2002).

[46] *See* Section IV of this preamble for a thorough discussion of past policy and guidance on reasonably available control measures (RACM) and reasonably available control technology (RACT). Section IV of this preamble discusses the EPA's final policy that under subpart 4, for Moderate areas that demonstrate that attainment by the statutory attainment date is impracticable, RACM and RACT would constitute all those technologically and economically feasible measures available for sources in the area that can be implemented within 4 years of designation, but they would not constitute the complete set of measures required to

In light of the court's decision in *NRDC* v. *EPA,* the EPA considers it necessary to describe how states must address regulation of $PM_{2.5}$ precursors in attainment plans and NNSR programs for the $PM_{2.5}$ NAAQS. The court's decision made clear that appropriate regulation of all precursors in designated nonattainment areas is presumptively required under the CAA, and the regulation of precursors in general is a critical issue for attainment of the $PM_{2.5}$ NAAQS because secondarily formed particles are a substantial component of $PM_{2.5}$ concentrations in most nonattainment areas of the United States.

For the purposes of this rule, the EPA considers that for all $PM_{2.5}$ nonattainment areas, the $PM_{2.5}$ precursors for regulatory purposes are the four scientific precursors that the EPA has previously identified: SO_2, NO_X, VOC and ammonia. This rule does not include any national presumption that would allow a state to exclude, without a demonstration, sources of emissions of a particular precursor from further analysis for attainment plan or NNSR control requirements in a $PM_{2.5}$ nonattainment area. However, the EPA's interpretation of subpart 4 requirements with respect to precursors in attainment plans for PM_{10}, as set out in the General Preamble, contemplates that the state may develop an attainment plan that regulates only those precursors that are necessary to control for purposes of timely attainment in the nonattainment area, *i.e.,* states may determine that only certain precursors need to be regulated in a particular $PM_{2.5}$ nonattainment area for attainment purposes.[47] Courts have upheld this approach to the requirements of subpart 4 for PM_{10}.[48] The EPA believes that application of a similar approach to $PM_{2.5}$ precursors under subpart 4 is appropriate and reasonable.

The EPA interprets the CAA to require states to inventory emissions and adopt control measures as appropriate for direct $PM_{2.5}$ and all $PM_{2.5}$ precursors. This interpretation is based on CAA section 302(g), which defines an air pollutant as including precursors contributing to the formation of that pollutant; the EPA's identification of the four main scientific $PM_{2.5}$ precursors; and the CAA provisions requiring adoption of all control measures (*i.e.,* RACM and RACT) needed in order to attain the standard as expeditiously as practicable. CAA section 189(e) explicitly requires that the control requirements applicable for major stationary sources of direct $PM_{2.5}$ emissions must also apply to major stationary sources of $PM_{2.5}$ precursors, unless the state provides a showing that emissions of a particular precursor from major stationary sources do not contribute significantly to levels that exceed the standard in the nonattainment area of concern. Thus, the statute generally requires control of all $PM_{2.5}$ precursors in a nonattainment area, but it provides an express exception applicable to major stationary sources in such areas if an appropriate demonstration is made.

The EPA also notes that CAA section 189(e) contains certain ambiguities that require interpretation. For example, CAA section 189(e) does not specify the precise method by which a state or the EPA should determine whether precursor emissions from major stationary sources do not "contribute significantly" to levels which exceed the standard in a given nonattainment area. Subpart 4 also does not explicitly address whether it would be appropriate to include a potential exemption from precursor controls for all source categories under certain circumstances, because a specific exemption from precursor controls is expressly made available in the statute only for major stationary sources. These issues are addressed in this final rule.

B. Summary of Proposal

In the proposal, the EPA sought comment on how states could focus regulatory efforts on the appropriate $PM_{2.5}$ precursors in each area. Rather than simply requiring each state to regulate direct $PM_{2.5}$ and all $PM_{2.5}$ precursors without regard to whether that would be appropriate and necessary for expeditious attainment of the NAAQS, EPA took comment on different approaches for states to focus regulatory efforts on the appropriate pollutants. Thus, in the proposal, the EPA sought comment on three options by which a state could demonstrate that emission control requirements for a particular $PM_{2.5}$ precursor or precursors would not be required for sources in a particular nonattainment area.[49] The proposed "precursor demonstration" options outlined procedures and technical analyses a state could elect to perform to demonstrate that control requirements for sources of a particular precursor are not needed for expeditious attainment, or that a particular $PM_{2.5}$ precursor does not significantly contribute to $PM_{2.5}$ concentrations in the area. The proposal indicated that if the EPA were to approve such a precursor demonstration, then it would not be necessary for the state to adopt control requirements for sources of the precursor or precursors in the $PM_{2.5}$ attainment planning process generally and/or in the NNSR permitting process for that particular area. The EPA requested comment on whether the final rule should include one or more precursor demonstration approaches, and whether it would be appropriate to combine specific elements from different options.

The EPA also described three technical issues associated with any such precursor demonstration and sought comment on the following: (1) The appropriate geographic scope of the analysis; (2) whether specific types of technical analyses (such as evaluating the contribution of the precursor to total $PM_{2.5}$ concentrations, or evaluating the sensitivity of the area to decreases or increases of the precursor) should be required for a precursor demonstration; and (3) whether the EPA should establish a bright-line ambient air quality threshold (*e.g.,* 3 percent of the level of the relevant NAAQS in the area) to define an air quality change below which a precursor contribution should not be considered to be significant, thereby establishing that control of sources of the precursor is unnecessary in the area.

Lastly, the EPA indicated in the proposal that if a state had an approved precursor demonstration for a particular precursor in a Moderate area and the EPA later reclassifies the area to Serious, then the state would be required to develop an updated precursor demonstration if the state were again interested in having the precursor treated as insignificant for purposes of the Serious area plan. An updated precursor demonstration is necessary because many factors (*e.g.,* emissions, air quality and fine particle concentrations) could have changed substantially since the original

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demonstrate attainment as expeditiously as practicable.

[47] *See* the **Federal Register** published on April 16, 1992 (57 FR 13498, 13540 and 13541).

[48] *See, e.g., Assoc. of Irritated Residents* v. *EPA, et al.,* 423 F.3d 989 (9th Cir. 2005).

[49] The three proposed options were: (1) Option 1—two independent analyses consisting of an attainment planning analysis showing that control measures for a particular precursor are not needed for expeditious attainment and an optional NNSR analysis showing that major stationary sources of a particular precursor do not contribute significantly to levels that exceed the $PM_{2.5}$ standard, (2) Option 2—a single analysis (for purposes of attainment planning and NNSR) showing that all emissions of a particular precursor do not contribute significantly to levels that exceed the $PM_{2.5}$ standard, and (3) Option 3—a single analysis (for purposes of attainment planning and NNSR) showing that control measures for all sources for a particular precursor are not needed for expeditious attainment.

demonstration for the Moderate area attainment plan.[50]

C. Final Rule

The EPA received many comments on the three proposed precursor demonstration approaches. Most commenters supported the inclusion of some kind of optional precursor demonstration in the final rule. Some commenters suggested that states should have the flexibility to develop any of the types of demonstrations that the EPA described in the three proposed options. One group of commenters opposed any option that would exempt a particular precursor from control measures even if the state could demonstrate it could expeditiously attain the standard by the attainment date without controls on sources of the precursor. Another group of commenters suggested that if only one option is finalized, it should allow a state to rely on a sensitivity analysis to show that changes in emissions of a particular precursor would not have a substantial contribution to $PM_{2.5}$ concentrations in the area.

The EPA agrees with commenters who suggested that states should have the flexibility to conduct different types of precursor demonstrations appropriate to the area in question. Regardless of the type of precursor demonstration, the state will still need to provide adequate technical support and that demonstration will be subject to EPA approval. Thus, the EPA concludes that the specific form of the demonstration is not as crucial as its content and adequacy, in light of the facts and circumstances in the area. The EPA disagrees with commenters who argued that a state should not be able to determine insignificance for a precursor based on an attainment planning analysis showing expeditious attainment in the area without adopting new emissions reduction measures for the precursor in question. This approach has been upheld under subpart 4 with respect to implementation of the PM_{10} NAAQS, and the EPA finds that it is reasonable to allow for a similar policy when implementing the $PM_{2.5}$ NAAQS.[51]

After consideration of the numerous comments received on this issue, the EPA has decided to adopt a final approach that allows exclusion of certain precursor sources from certain SIP requirements, provided that states make the appropriate demonstrations. However, the EPA has revised the details of the specific types of demonstrations based on further evaluation of the comments received. Section III.C.1 of this preamble describes the expeditious attainment demonstration, in which a state shows that control requirements for a particular precursor are not needed for expeditious attainment by the Moderate area attainment date. Section III.C.2 of this preamble describes the three types of optional precursor demonstrations a state may submit to the EPA to establish that emissions of a precursor do not contribute significantly to $PM_{2.5}$ levels in a particular nonattainment area: (a) Comprehensive precursor demonstration; (b) major stationary source precursor demonstration; and (c) NNSR precursor demonstration. Each option is described in detail in the following subsections.

Section III.C.3 of this preamble highlights various technical issues associated with precursor demonstrations, including the appropriate geographic scope of the analyses, thresholds for characterizing an insignificant air quality change, and different analytical methods for assessing precursor contributions. Section III.C.4 of this preamble discusses certain procedural issues associated with precursor demonstrations. Section III.C.5 of this preamble addresses other relevant comments and responses.

1. Expeditious Attainment Demonstration

As noted earlier, the EPA's interpretation of subpart 1 and 4 requirements with respect to precursors in attainment plans for PM_{10} has been that a state may develop an attainment plan that regulates only those precursors that are necessary to control for purposes of timely attainment in the area. The EPA believes that a similar policy approach for $PM_{2.5}$ precursors is also appropriate.

Under the expeditious attainment demonstration, a state may be able to determine through its identification of RACM/RACT for existing sources in an area whether expeditious attainment could be achieved without new control measures for a particular $PM_{2.5}$ precursor. It is important to note that this approach is available to a state only if the demonstration for the area (1) ensures attainment by the Moderate area attainment date (*i.e.,* the end of the sixth calendar year after designation), and (2) ensures that the area could not advance the attainment date by at least 1 year if it were to adopt reasonable control measures for the precursor in question. If the state determines that the area cannot practicably attain by the relevant Moderate area attainment date, then the state still would have the option of developing one of the precursor demonstrations described in Sections III.C.2.a–c of this preamble for showing that the precursor contribution is not significant. The expeditious attainment option is not available for Serious nonattainment areas because BACM/BACT measures for Serious areas are not solely limited to those measures needed for expeditious attainment under this final rule. (*See* further discussion of this issue in Section VI.D of this preamble, Serious Area Attainment Plan Control Strategies.)

For the expeditious attainment demonstration, the required analysis is what is already needed for a Moderate area attainment demonstration: The identification of reasonably available control measures that provide for expeditious attainment by the attainment date, and a determination that attainment cannot be advanced through the imposition of other reasonable measures (*i.e.* RACM/RACT and other reasonable measures that are identified for the area but not necessary for the area to attain within 6 years). *See* 40 CFR 51.1006(a). After a comprehensive emissions inventory has been developed, the state should then identify potential control measures and assess factors related to technological feasibility, economic feasibility, and time needed for implementation for all types of sources in the area (*i.e.,* stationary, area, mobile) and all precursors emitted by such sources as included in the emissions inventory.

After identifying the set of control measures that are economically and technologically feasible for all precursors, the state may be able to show (using best available information on emissions, control options, technologies, and costs, along with appropriate air quality modeling) that those measures that could be identified as RACM/RACT and additional reasonable measures would not need to include new control measures for sources of a given precursor.[52] The state could show this by demonstrating that one set of control measures to be adopted into the plan would provide for attainment by the statutory attainment date; and that an additional set of potential control measures (including measures for the precursor in question, and remaining measures for all other contributing pollutants) *collectively* would not advance the attainment date by at least 1 year (*i.e.,* enable the area to attain 1 year earlier). Under these circumstances, the state would not need to adopt the second set of measures (including measures for the particular precursor) because they would not expedite attainment of the NAAQS in the area.

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[50] For more information on the proposed precursor demonstration options, *see* 80 FR 15340, at 15350–15362.

[51] *See, e.g., Assoc. of Irritated Residents* v. *EPA, et al.,* 423 F.3d 989 (9th Cir. 2005).

[52] *See* Section IV.D.1 of this preamble, Background for Attainment Plan Control Strategy, for further discussion of "additional reasonable measures."

If the attainment planning demonstration shows that the area can attain the NAAQS expeditiously without new emission reduction measures for a particular precursor, the state would be required to adopt control measures for only a subset of the four $PM_{2.5}$ precursors as part of the attainment plan for the area, and existing sources in the nonattainment area would not be required to adopt new control measures for the particular precursor. Accordingly, the state would not need to address the precursor in the reasonable further progress plan, in quantitative milestones and associated reports, or be required to adopt contingency measures to reduce the precursor. *See* 40 CFR 51.1009(a)(4)(i). (Note that for purposes of meeting the contingency measure requirement, however, the state would still have the discretion to adopt control measures as contingency measures for a precursor that would otherwise not be subject to RACM/RACT requirements.)

It also should be noted that development of an approvable attainment plan that does not include new control measures for a particular precursor would not exempt the state from the requirements to address the same precursor with respect to the NNSR program, nor would it excuse the state from reconsidering the significance of the precursor to the PM nonattainment problem in any subsequent Serious area SIPs that could be required for the nonattainment area.

2. Optional Precursor Demonstrations

a. *Comprehensive Precursor Demonstration.* In line with the EPA's proposal for precursor insignificance demonstrations, the EPA is finalizing an option whereby a state may submit a comprehensive precursor demonstration as part of any Moderate or Serious area attainment plan. The use of the term "comprehensive" here refers to the fact that the demonstration covers all existing stationary, area, and mobile sources, rather than major sources alone. Note, however, that the comprehensive precursor demonstration does not affect precursor requirements for future new sources. Under this comprehensive precursor demonstration, the state would need to show that emissions of a particular precursor from all existing stationary, area, and mobile sources located in the nonattainment area do not contribute significantly to $PM_{2.5}$ levels that exceed the standard in the area. The state would first need to evaluate the contribution of all existing source emissions of the particular precursor to $PM_{2.5}$ concentrations that exceed the $PM_{2.5}$ standard (described in Section III.C.2 of this preamble). If the state cannot demonstrate via the concentration-based precursor demonstration that sources of a particular precursor have an insignificant contribution to $PM_{2.5}$ levels in an area,, then the state could still demonstrate that the precursor's contribution is insignificant by conducting a sensitivity analysis to evaluate the sensitivity of ambient $PM_{2.5}$ concentrations in the nonattainment area to decreases in the precursor emissions in the area (*e.g.,* whether a given decrease is insignificant) as discussed further in Section III.C.2.c of this preamble.

If a comprehensive precursor demonstration for a precursor is approved, the state would not establish a motor vehicle emissions budget for the relevant precursor, and regional emissions analyses for the precursor would not be required to be included in transportation conformity determinations. This is consistent with the transportation conformity rule's provisions concerning $PM_{2.5}$ precursors. (*See* 40 CFR 93.102(b)(2)(iv) and (v)). Separately, states may continue to determine that on-road emissions of $PM_{2.5}$ precursors are insignificant even if emissions of a given precursor from other sources are significant. (*See* 40 CFR 93.102(b)(2)(iv) and (v) and 93.109(f)). With regard to general conformity, if a state precursor demonstration is approved for one or more precursors, federal agencies would not be required to address the affected precursor(s) in general conformity determinations.

If a comprehensive precursor demonstration is approved by the EPA, then in developing the attainment plan for the area, the state would not be required to adopt control measures (*e.g.,* RACM/RACT) for the precursor for any existing stationary, area, or mobile sources in the nonattainment area. The attainment plan also would not be required to address the relevant precursor in meeting the RFP or quantitative milestone requirements, or in adopting contingency measures because these requirements commonly apply to pollutants that are the subject of emission reduction measures in the attainment plan. (Note that for purposes of meeting the contingency measure requirement, however, the state would still have the discretion to adopt emission reduction requirements on the precursor in question, in conjunction with emission reduction requirements on other pollutants.) The state would still need to include the precursor in all nonattainment area emission inventory submissions.

It also should be noted that development of an approvable attainment plan that does not include new control measures for a particular precursor would not exempt the state from the requirements to address that precursor with respect to the NNSR program, nor would it excuse the state from reevaluating the significance of the precursor to the PM nonattainment problem in any subsequent Serious area SIPs that could be required for the nonattainment area.

b. *Major Stationary Source Precursor Demonstration.* The state has the option of submitting a major stationary source precursor demonstration as part of any Moderate or Serious area plan, consistent with CAA section 189(e). This demonstration differs from the comprehensive demonstration in that it only evaluates existing major sources, and therefore may only be used to justify the exclusion of existing major sources from the control requirements for the applicable precursor. Although the EPA expects that most states making precursor demonstrations will opt for comprehensive demonstrations, this option is provided to offer additional flexibility. The requirements for a stationary source precursor demonstration are nearly identical to those of the comprehensive precursor demonstration, except the state would only need to show that a particular precursor from all existing *major stationary sources* located in the nonattainment area do not contribute significantly to $PM_{2.5}$ levels that exceed the standard in the area. Similar to the comprehensive demonstration, the state must first evaluate the contribution of major stationary source emissions of the particular precursor to $PM_{2.5}$ levels that exceed the $PM_{2.5}$ standard (pursuant to section III.C.3.c of this preamble). If the state cannot demonstrate via the concentration-based precursor demonstration that sources of a particular precursor have an insignificant contribution to $PM_{2.5}$ levels in an area, then the state could still try to demonstrate that the precursor is insignificant by conducting a sensitivity analysis to evaluate the sensitivity of $PM_{2.5}$ levels in the nonattainment area to a reduction in major stationary source emissions in the area (pursuant to Section III.C.3.d of this preamble).

If such a demonstration is approved by the EPA, then in developing the attainment plan for the area, the state would not be required to adopt control measures for the precursor for existing major stationary sources in the nonattainment area. The attainment plan also would not be required to address the emissions of the relevant precursor from major stationary sources in meeting the RFP or quantitative milestone requirements, or in adopting contingency measures. (Note that for purposes of meeting the contingency measure requirement, however, the state would still have the discretion to adopt emission reduction requirements on the precursor in question, in conjunction with emission reduction requirements on other pollutants.) The state would still need to include stationary source emissions of the precursor in all nonattainment area emission inventory submissions.

Note that a state might consider developing a major stationary source demonstration to avoid the requirement to adopt nonattainment planning control measures for a particular precursor emitted from existing major stationary sources in the area if the state does not believe that it could comprehensively demonstrate that the precursor does not have a significant contribution, and if major stationary source emissions of the precursor do not make up a very large percentage of the emissions inventory in the area. For example, it might be possible that in a particular area the overwhelming amount of emissions of a certain precursor could originate from mobile or area sources, or both, but not from existing major stationary sources. If the EPA approves a major stationary source precursor demonstration, the attainment plan would still need to evaluate and potentially impose control requirements for the relevant precursor for existing non-major stationary sources, area sources and mobile sources in order to demonstrate expeditious attainment.

It also should be noted that development of an approvable attainment plan that does not include new control measures for a particular precursor would not exempt the state from the requirements to address that precursor with respect to the NNSR program, nor would it excuse the state from the requirement to evaluate and adopt control measures for the precursor in any subsequent Serious area SIPs that could be required for the nonattainment area.

c. *NNSR Precursor Demonstration.* The state also has the option of submitting a NNSR precursor demonstration as part of any Moderate or Serious area plan. This specific type of precursor demonstration is the only one of the three demonstrations described in this section that if approved would exempt new and modified major stationary sources of a precursor from regulation under the NNSR permitting program.

Under the NNSR precursor demonstration, the state would need to conduct an analysis to evaluate the sensitivity of $PM_{2.5}$ levels in the nonattainment area to an increase in emissions of a particular precursor in the area, simulating the response of the atmosphere (and associated $PM_{2.5}$ concentrations) to the addition of one or more new or modified stationary sources in the nonattainment area (*see* Section III.C.3.d of this preamble). Section III.C.3 of this preamble addresses additional issues related to technical analyses for precursor demonstrations.

The EPA believes that this approach to interpreting CAA section 189(e) of the statute as it applies to control requirements for the NNSR program is appropriate because (1) an analysis that evaluates the sensitivity of the atmosphere in an area to increases in emissions would most closely replicate the scenario of concern, where precursor emissions from new major stationary sources or major modifications are *added* to the existing inventory for the area; and (2) this approach would take into consideration the specific atmospheric chemistry and emissions profile that varies from area to area. For example, one nonattainment area may have low emissions of a particular precursor from all existing sources (and corresponding low current ambient contributions from the precursor), but the introduction of a new major stationary source of emissions of that particular precursor could in some cases significantly contribute to the ambient $PM_{2.5}$ levels in the area because other pollutants with which the precursor reacts in the atmosphere could be relatively abundant.

For purposes of the NNSR precursor demonstration, the state is not required to first evaluate the contribution of existing major sources to $PM_{2.5}$ levels that exceed the standard in the area, as would be required by the comprehensive and major stationary source demonstrations. Since NNSR permitting requirements do not apply to existing sources (unless such sources engage in a major modification), the EPA does not believe it is necessary or reasonable to require evaluation of current emissions from existing major stationary sources as it would not inform the question of whether increases in emissions would significantly contribute to $PM_{2.5}$ levels in the area. Note, however, that the NNSR precursor demonstration is used only to justify an exclusion of sources of the precursor from the NNSR control requirements in the area. A state would need to pair the NNSR precursor demonstration with another type of precursor demonstration to address control requirements beyond NNSR, as described previously for each type of demonstration.

3. Technical Issues Associated With Precursor Demonstrations

a. *Geographic Area.* The proposal indicated that the emissions inventory to be used as the starting point for the comprehensive, major stationary source, and NNSR precursor demonstrations should represent emissions from sources located in the nonattainment area, and the final rule remains unchanged. The EPA believes that limiting the emissions inventory for these analyses to sources in the nonattainment area is appropriate based on the statutory construction of CAA section 189(e), in which the relevant test is whether "such sources contribute significantly to [$PM_{2.5}$] levels which exceed the standard in the area." The EPA believes that a reasonable interpretation is that this provision applies to sources in the nonattainment area.

b. *Significance Threshold.* The proposal described the concept of including a bright-line threshold of 3 percent of the relevant NAAQS in the rule for precursor demonstrations other than the expeditious attainment approach, such that if an air quality contribution was found not to exceed the threshold amount, then it would not be considered significant. The proposal also included an option for no bright-line threshold in the final rule, based on the recognition that all nonattainment area situations are different.

Some commenters supported the bright-line threshold concept, but they suggested thresholds across a broad range, from less than 1 percent of the relevant NAAQS, to up to 5 percent. Some commenters stated that inclusion of a bright-line threshold of 3 percent of the relevant NAAQS was preferred because without such a threshold, states would be unsure about whether their proposed precursor assessment would be acceptable. Other commenters supported having no bright line threshold because the circumstances of each area are unique, and for that reason each area should be considered on a case-by-case basis.

The EPA found merit in comments supporting both proposed options. The EPA agrees that an insignificance threshold can help avoid situations where lack of clarity may lead to delays in the EPA assessment of precursor demonstrations. At the same time, the EPA understands that $PM_{2.5}$ nonattainment problems are complex and vary greatly based on the facts and circumstances of each area.

After considering the range of comments on this issue and the complexity of the types of analyses that may be conducted for precursor demonstrations, the EPA has decided that the best approach is for the final rule to codify the availability and basic requirements for precursor demonstrations, but to provide technical details (such as a recommended approach for assessing whether a particular air quality concentration threshold can be considered to be insignificant in a given area) in guidance supporting this final rule.

c. Concentration-based Contribution Analysis. The first type of analysis required for the comprehensive precursor demonstration (or, less commonly, the major stationary source precursor demonstration) is an existing source contribution analysis that would demonstrate whether emissions of a particular precursor from all existing sources (or, for a major source precursor demonstration, emissions from existing major sources) in the nonattainment area do not significantly contribute to $PM_{2.5}$ concentrations that exceed the standard in the area. The state should use technically credible approaches for estimating the ambient contribution of emissions of a particular precursor to total $PM_{2.5}$ concentration in the nonattainment area. The EPA anticipates that the forthcoming technical guidance will discuss the possible use of advanced air quality modeling tools to estimate precursor contributions to total $PM_{2.5}$ concentrations in an area. For example, several photochemical air quality models (*e.g.,* Community Multi-Scale Air Quality Model (CMAQ) and the Comprehensive Air Quality Model with Extensions (CAMx)) can be used to quantify the contributions of precursor emissions to $PM_{2.5}$ concentrations in the area.[53]

Other techniques such as the analysis of chemical speciation data and emissions inventories also may be appropriate for determining the contribution of a particular precursor to $PM_{2.5}$ concentrations. For example, SO_2 emissions and measured sulfate concentrations (in the form of ammonium sulfate or other forms) may be small in a particular nonattainment area. A simple analysis of measured species concentrations (attributable to a particular precursor) combined with nonattainment area emissions and other relevant data analyses may be sufficient to show that a precursor does not contribute significantly to $PM_{2.5}$ concentrations in the area.

d. Sensitivity-based Contribution Analysis. A second type of analysis may also be used in developing comprehensive precursor demonstrations (or, less commonly, major source precursor demonstrations). This type of analysis is a sensitivity-based contribution analysis that would demonstrate the degree to which concentrations in the nonattainment area are sensitive to decreases of a precursor. Changes in $PM_{2.5}$ concentrations at a particular location often will not be linear with respect to changes in $PM_{2.5}$ precursor emissions; therefore, sensitivity analyses are useful for better understanding the complexity and variability of the atmospheric chemistry affecting $PM_{2.5}$ concentrations in different areas across the country. A sensitivity-based contribution analysis evaluating the effect of precursor emissions reductions could be used in the event the state cannot demonstrate via the concentration-based analysis that sources of a particular precursor have an insignificant contribution to $PM_{2.5}$ levels in an area.

The EPA also requires a sensitivity-based analysis as the means for conducting the NNSR precursor demonstration. In this case, in contrast to the assessment of decreases described for the comprehensive (or major source) precursor demonstration for existing sources, the appropriate sensitivity analysis is one that evaluates the impact of precursor emissions *increases*—without the need for a separate evaluation of existing source contribution to $PM_{2.5}$ concentrations. This analysis is clearly most appropriate for NNSR, which is a program that governs emissions increases. Thus, the final rule requires that such an analysis must be used if a state chooses to submit a NNSR precursor demonstration.

The EPA states in the final rule that a sensitivity-based analysis is an appropriate approach for understanding whether emissions of a precursor make an insignificant contribution to $PM_{2.5}$ levels in an area. Several main components of $PM_{2.5}$ are secondarily formed in the atmosphere and are the result of chemical reactions between various $PM_{2.5}$ precursors. In some areas, one precursor may be abundant while a second precursor, with which it primarily reacts, may be less abundant. In such cases, a sensitivity analysis may find that reducing emissions of the second, less abundant precursor (the "limiting" precursor) may be generally more effective for reducing $PM_{2.5}$ concentrations. It may also find that increasing emissions of the less abundant precursor may be more effective at increasing $PM_{2.5}$ concentrations than a comparable tonnage increase of a more abundant precursor.

In another type of area, the $PM_{2.5}$ concentrations that exceed the standard may be commonly dominated by primary $PM_{2.5}$ emissions rather than by secondarily formed $PM_{2.5}$. In such an area, a sensitivity analysis may be able to demonstrate that sources of a particular precursor in the nonattainment area do not contribute significantly to $PM_{2.5}$ levels that exceed the standard, and that the potential air quality improvement from reducing emissions of the precursor in the area may be limited.

Thus, the most effective precursor strategies for reducing $PM_{2.5}$ concentrations as part of attainment planning will vary from area to area, depending upon which specific precursors play a role in forming or limiting $PM_{2.5}$ formation in the particular area. The EPA therefore believes that it is a reasonable interpretation of the statute to allow a precursor to be excluded from control requirements if the $PM_{2.5}$ concentration in the area is insensitive to decreases of that precursor.

For states that choose to develop an optional precursor demonstration, the final rule provides that in addition to the basic requirement to do a concentration-based contribution analysis, the state may choose to develop a sensitivity-based contribution analysis evaluating potential emissions reductions for either a comprehensive precursor demonstration or a major stationary source demonstration intended to show that emissions reductions of the particular precursor are not effective in reducing $PM_{2.5}$ levels that exceed the standard in the area. As noted previously, the EPA expects to recommend approaches for assessing whether a particular air quality concentration threshold can be considered to be insignificant in a given area. If a concentration-based contribution analysis conducted for either a comprehensive precursor demonstration or a major stationary source precursor demonstration shows that the contribution from a precursor is less than a particular threshold which may be considered insignificant at each $PM_{2.5}$ monitor in the area, then the EPA could approve the concentration-based contribution analysis. However, if a concentration-based contribution analysis cannot be approved (*e.g.,* shows that the contribution of a precursor to $PM_{2.5}$ levels in the area is not less than such a threshold at one or more monitors), then the overall precursor demonstration still could be approved, but only if the state also provides an appropriate sensitivity-based contribution analysis. If the sensitivity-based contribution analysis shows that the reduction in $PM_{2.5}$ concentration at each $PM_{2.5}$ monitor resulting from an emission reduction level that would not exceed such a threshold, then the EPA could approve the overall precursor demonstration, and the state would not be required to adopt control requirements for the precursor or address the precursor for attainment planning purposes.

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[53] For more information on CMAQ, *see http://www.epa.gov/air-research/community-multi-scale-air-quality-cmaq-modeling-system-air-quality-management.* For more information on CAMx, *see http://www.camx.com/.*

In evaluating whether it would be appropriate to exclude sources of any precursors from NNSR regulation in a nonattainment area, it is important to understand the sensitivity of the atmosphere to potential increases in precursor emissions that could result from major source growth (from both new sources and major modifications at existing major sources) in the nonattainment area. For example, in some circumstances, adding a few hundred tons of a "less abundant" precursor to an area could result in a significant increase in $PM_{2.5}$ concentrations even if there are currently very few existing major sources of the precursor in the area. In contrast to the emissions reduction analyses described for attainment planning purposes, sensitivity analyses that consider the effect of potential emissions increases of a particular precursor in the nonattainment area will help the state and the EPA to understand the potential response of $PM_{2.5}$ concentrations to increased emissions in the area in order to assess whether the contribution from such increases is not significant under CAA section 189(e). In assessing whether a state precursor demonstration (*i.e.,* for attainment planning or for NNSR) can be approved, the EPA will consider the air quality changes estimated in the state's technical sensitivity analyses, their relationship to thresholds developed under any EPA-recommended approaches (including any thresholds that EPA may recommend), and any other information presented by the state.

4. Procedural Considerations

a. Consultation and Public Review. The EPA anticipates that a state's development of an approvable $PM_{2.5}$ precursor demonstration will require a substantial level of effort and consultation with the EPA. Such a demonstration by the state would likely involve technically rigorous and complex analyses, such as air quality modeling and ambient data analyses. Accordingly, the EPA strongly recommends that any state that is considering limiting the applicability and associated control strategy decisions only to specific precursors, either for the attainment plan, for the NNSR permitting program, or for both, should develop a precursor demonstration early in the attainment plan development process. The EPA is committed to consulting with states on designing technically appropriate precursor demonstrations consistent with EPA technical guidance. If a state chooses to develop a precursor demonstration, it must be submitted to the appropriate EPA regional office no later than the date of submission of the relevant attainment plan or NNSR program revision; an earlier submission is preferable. For example, if a state submits the Moderate area plan elements no later than 18 months from the date of designation (as discussed in Section IV.A of the preamble), it should submit any precursor demonstration no later than this same date. In its review of any precursor demonstration provided by a state, the EPA will consider all relevant information.

The critical first step in any precursor analysis is the development of a comprehensive inventory of all precursor emissions in the nonattainment area. A state will not be able to reasonably determine whether reductions of a given $PM_{2.5}$ precursor are needed for expeditious attainment, or whether sources of such precursor are insignificant contributors to $PM_{2.5}$ levels above the standard in an area, unless the state has adequately accounted for all nonattainment area emissions in its emissions inventory. (*See* section IV.B of this preamble for more details on emission inventory requirements.)

In the preamble to proposed rule, we indicated that if a state developed a precursor demonstration as part of its draft attainment plan or NNSR program submission, then in accordance with the state rulemaking process, the demonstration would be subject to public review at the state level. We also stated that, as required under any rulemaking process, the state had to consider and provide a response in the rulemaking record to any information or evidence brought forward by commenters during the state's SIP planning, development and review process. By ensuring that this important issue was explicitly addressed and supported in any attainment plan or NNSR program revision submitted to the EPA, the EPA could better evaluate the precursor demonstration in accordance with its obligations under the CAA. The EPA believes these are sound procedural steps for a state rulemaking process, and the final rule includes similar language requiring public review of any proposed precursor demonstration.

If a state chooses to develop a comprehensive precursor demonstration or major stationary source precursor demonstration for a nonattainment area, it must submit a concentration-based contribution analysis and, if applicable, a sensitivity-based contribution analysis conducted for the area. In cases where a sensitivity-based analysis was developed the concentration-based analysis must also still be submitted. Although the rule clearly provides that the precursor demonstration requirement may still be satisfied in such cases, the information in the concentration-based analysis will help inform review of the overall demonstration by the EPA. Similarly, the data from the concentration-based analysis should be available in the public record because it will help inform the review of the overall precursor demonstration by the public. *See* 40 CFR 51.1006(b).

b. Precursor Demonstration to be Reevaluated for Each New State Implementation Plan. There may be situations where the EPA approved a Moderate area plan that excluded a precursor from regulation from one or more requirements based on an approvable precursor demonstration, and then the area is reclassified as a Serious area, triggering an additional plan submission requirement. (Section V of this preamble provides additional detail on reclassification of areas from Moderate to Serious under subpart 4.) In addition, an area that had been reclassified as Serious later may be required to submit one or more additional SIPs if it obtains an extension of the Serious area attainment date, or if it fails to attain the standard by the end of the tenth year after designation. For a state seeking to continue a precursor exclusion in a subsequent attainment plan or NNSR program submission, the final rule requires the state to assess the appropriateness of continuing the exclusion by providing a new precursor demonstration updated to reflect the type of plan and the conditions in effect when the new plan is submitted.

When an area is reclassified to Serious, existing sources of all $PM_{2.5}$ precursors in the area are again presumptively subject to evaluation for BACM/BACT control measures and potential future control requirements, unless a new precursor demonstration is developed and approved as part of the Serious area plan. As noted in the discussion of the provisions for excluding sources of precursors from certain Moderate area requirements based on an expeditious attainment demonstration, this option is not available for Serious areas. Accordingly, if the state seeks to submit an updated precursor demonstration for a Serious area, at this stage it must submit a comprehensive, major stationary source, or NNSR precursor demonstration. Regardless of the type of demonstration(s) provided in the Moderate area plan, the final rule requires that the state must submit a reevaluated and updated precursor demonstration for the Serious area plan. The reason for this is that the Serious area plan would be due several years after the submission of a state's original precursor demonstration, and over that period, substantial emissions changes could have occurred that might call into question the basis of the previous precursor demonstration. In addition, because the area failed to attain by the Moderate area attainment date, it is reasonable and appropriate to require the state to reconsider and update its prior precursor demonstration. The final rule also requires similar updates for each successive plan beyond the initial Serious area plan (such as a revised Serious area plan for an area that fails to attain by the end of the tenth calendar year after designation). The EPA recommends that in developing a revised precursor demonstration, the state should consider changes in a number of factors, including: Changes in emissions inventory levels due to implementation of control programs, growth in emissions, and changes in emission estimation methodologies; recent ambient air quality concentrations; fine particle composition and the sensitivity of the atmosphere to increases and decreases of different precursors; advances in technical tools and modeling techniques to assess the effectiveness of precursor reductions; and advances in control technologies and emission reduction programs.

5. Comments and Responses.

Comment: With regard to whether the existing source contribution analysis or the sensitivity-based contribution analyses should be required if a state opts to submit a precursor demonstration, a number of commenters supported only the sensitivity analysis because they believed the analysis would help identify the control measures that are most effective at reducing $PM_{2.5}$ concentrations. Some commenters noted that conducting a "zero-out" analysis (*i.e.,* simulating the change in atmospheric chemistry and $PM_{2.5}$ concentrations due to a hypothetical removal of 100 percent of the emissions of a precursor from the inventory) is not appropriate for a sensitivity analysis because the response of the photochemical grid model is highly non-linear under such circumstances.

Another group of commenters supported requiring only the concentration-based existing source contribution analysis because only that analysis would address the question alluded to in the statute, which is whether sources of the precursor contribute significantly to levels which exceed the standard in the area. These commenters stated that sensitivity-based analyses reflect localized conditions and do not represent a consistent effect across an air basin. The commenters suggested that sensitivity analyses might be considered to inform what pollutants are most cost-effective to control, but believed that this is dubious because the fact that certain pollutants are very abundant is likely the result of a history of under-regulation. They suggested that it actually may be cheaper to control the more abundant pollutant than the less abundant pollutant in order to achieve an equal amount of air quality improvement.

Response: The EPA agrees with commenters who suggested that the rule should closely align with the statutory language in CAA section 189(e) of subpart 4 and include provisions for evaluating the contribution of existing sources to $PM_{2.5}$ levels which exceed the standard in the area. For this reason, the final rule states that the existing source contribution analysis should be required for any comprehensive precursor demonstration or major stationary source precursor demonstration seeking to exempt a precursor from attainment planning requirements.

The EPA also believes that a sensitivity-based contribution analysis is consistent with the language and intent of CAA section 189(e). As applied to attainment plans, CAA section 189(e) allows states to evaluate whether $PM_{2.5}$ precursors significantly contribute to levels which exceed the standard in the area. The intent of CAA section 189(e) in applying control requirements to $PM_{2.5}$ precursors is to ensure expeditious attainment of the standard. However, if conditions in a particular area are such that control of sources of one or more precursors does not reduce $PM_{2.5}$ concentrations in the area, then those controls will not help the area attain (expeditiously or otherwise). Therefore, the EPA disagrees with commenters who argue that sensitivity-based contribution analyses are not appropriate for determining if precursors do not significantly contribute to $PM_{2.5}$ levels in the area. The EPA believes that sensitivity-based contribution analyses can be useful for determining whether adoption of control requirements for sources of a particular precursor would be effective in reducing $PM_{2.5}$ concentrations, and can be useful for determining whether potential emissions increases under the NNSR program would lead to insignificant air quality changes. For this reason, the final rule allows states to conduct sensitivity-based contribution analyses for the comprehensive, major stationary source, and NNSR precursor demonstrations.

Comment: Some commenters expressed support for the precursor option from the proposal (*i.e.,* Option 3) that would have allowed for an expeditious attainment precursor demonstration to be deemed to demonstrate under CAA section 189(e) that emissions of the precursor do not need to be addressed for all major stationary source requirements, such as the NNSR program.

Response: Upon further consideration of this potential approach, the EPA decided that it would not be appropriate to include such an approach in the final rule. The reason for this is that an expeditious attainment planning analysis on its own would determine that the area could attain the standard by the Moderate area attainment date without new control requirements for sources of a particular precursor, but it would not address the potential impact of increased emissions of the precursor in the area due to new or modified sources, as is reasonably needed under the NNSR precursor demonstration. The evaluation of controls required for expeditious attainment does not consider what happens if new sources move into an area. Thus, while a state might be able to show that controlling existing sources of a precursor does not advance attainment, the analysis would not determine whether a new major source of that precursor might have a significant contribution to air quality. The EPA believes it is important for purposes of CAA section 189(e) and our overall environmental goal under the NNSR program to evaluate emissions increases. Consequently, the EPA has revised the details of the specific types of demonstrations to include a specific stand-alone demonstration for purposes of exempting new major stationary sources and major modifications of a precursor from regulation under the NNSR permitting program.

IV. Requirements for $PM_{2.5}$ Moderate Nonattainment Area Plans

Sections 189(a), (c), and (e) of the CAA require that Moderate area attainment plans contain the following: (i) An approved permit program for construction of new and modified major stationary sources (CAA section 189(a)(1)(A)); (ii) a demonstration that the plan provides for attainment by no later than the applicable Moderate area attainment date or a demonstration that attainment by that date is impracticable CAA (section 189(a)(1)(B)); (iii) provisions for the implementation of RACM and RACT no later than 4 years after designation (CAA section 189(a)(1)(C)); (iv) quantitative milestones that will be used to evaluate compliance with the requirement to demonstrate reasonable further progress (RFP) (CAA section 189(c)); and, (v) evaluation and regulation of $PM_{2.5}$ precursors (in general to meet RACM and RACT and other attainment planning requirements, and as specifically provided for major stationary sources under CAA section 189(e)). In addition, subpart 1 requirements for attainment plans continue to apply to $PM_{2.5}$ nonattainment areas unless they are superseded by subpart 4 provisions and include the following: (i) A description of the expected annual incremental reductions in emissions that will demonstrate RFP (CAA section 172(c)(2)); (ii) emissions inventories, as necessary (CAA section 172(c)(3)); (iii) other control measures (besides RACM and RACT) needed for attainment (CAA section 172(c)(6)); and, (iv) contingency measures (CAA section 172(c)(9)). The EPA notes that its longstanding guidance on interpreting these statutory requirements is embodied in the General Preamble and the Addendum.[54] The preamble for the proposed rule presented several interpretations of these provisions, and further explained where its proposal varies from past EPA guidance and the reasons for the variance. The following sections of this preamble explain the EPA's final approach and, where different from the proposal, also explain EPA's reasons for finalizing an amended approach. This final rule reflects our careful consideration of the numerous thoughtful comments we received from air agencies, who are responsible under the CAA for these implementation activities, and a variety of other stakeholders.

A. Plan Due Dates

1. Summary of Proposal

The EPA proposed to require that all Moderate area plan elements for a nonattainment area be submitted by the state no later than 18 months from the effective date of designation. The attainment plan submission would thus include all necessary plan elements required under CAA subparts 1 and 4.

2. Final Rule

The final regulations at 51.1003(a) require all Moderate nonattainment area elements to be submitted by no later than 18 months from the date of designation, as proposed. Section 189 of the CAA specifies the schedule by which states must submit attainment plans for the $PM_{2.5}$ NAAQS. Specifically, CAA section 189(a)(2)(B) requires states to submit an attainment plan that meets Moderate area attainment plan requirements no later than 18 months from the date of nonattainment designation.[55] While subpart 1 of the CAA could potentially be interpreted to authorize the EPA to provide up to 3 years after designation for states to submit certain attainment plan elements, the EPA believes that such an interpretation would be inconsistent with the specific deadlines that Congress imposed in subpart 4. The EPA concludes that all subpart 1 and subpart 4 nonattainment area requirements should be considered together in order to facilitate state development, and EPA review, of a comprehensive plan to attain the $PM_{2.5}$ NAAQS in a given nonattainment area. In fact, the EPA finds that meeting key subpart 1 requirements within the 18-month timeframe of subpart 4 is fundamentally necessary for the state to develop an approvable plan. For example, the state must develop an emissions inventory (or inventories) either before or at the same time as the other attainment plan elements due under subpart 4 because the information contained in the emissions inventory is critical for development of other elements of the Moderate area attainment plan, such as its precursor analysis, analysis of RACM and RACT and additional reasonable measures, and attainment demonstration modeling. The EPA's ability to evaluate the submitted attainment plan therefore will be impaired if the state does not submit all the required plan elements at the same time.

3. Comments and Responses

Comment: Commenters suggested that the EPA should interpret the statute to allow more time for states to develop and submit contingency measures.

Response: As discussed earlier in this section, the EPA believes that it would be inconsistent with the specific deadlines that Congress imposed in subpart 4 to allow contingency measures to be submitted later than the other elements of the attainment plan. Contingency measures need to be adopted and ready for rapid and timely implementation in the event a nonattainment area fails to meet RFP requirements or fails to attain the $PM_{2.5}$ NAAQS by the applicable attainment date. The state's evaluation of what emissions controls are appropriate to meet the contingency measure requirement is closely related to other aspects of the attainment plan, such as the pollutants and sources to be addressed in meeting the RACM/RACT requirements, and the amount of emissions reductions that the contingency measures should achieve, based upon the facts and circumstances of the attainment plan for the area. The same types of facts and analyses that are necessary for the other elements of an attainment plan are directly relevant to the development of contingency measures.

Although nothing in the CAA prohibits states from making separate attainment plan submissions to meet the individual required elements for attainment plans in advance of the required date, the EPA presumes that development and submission of all of the attainment plan elements simultaneously will be most efficient, both for the state and for the EPA in reviewing the state's submission. A Moderate area implementation plan with a single SIP submission due date will be less administratively burdensome than a program with two SIP submission due dates. Under an approach with two submissions, the state would likely need to issue two sets of proposed regulations, hold two sets of public hearings, and respond to two sets of public comments, rather than dealing with all of these requirements in one comprehensive action. Likewise, the EPA would have two separate submissions to review and two sets of proposed and final actions to publish in the **Federal Register** for every Moderate nonattainment area. Thus, for the reasons outlined earlier, the final rule includes a single Moderate area attainment plan submission deadline of 18 months after designation. Accordingly, the areas designated as nonattainment for the 2012 $PM_{2.5}$ NAAQS (with an effective date of April 15, 2015) are required to submit Moderate area attainment plans to the EPA no later than October 15, 2016. *See* 40 CFR 51.1003(a).

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[54] *See* 57 FR 13498, 13536, 13537, 13538, 13539, 13540, 13541, 13542, 13543, 13544 and 13545 (April 16, 1992); and 59 FR 41988 (August 16, 1994).

[55] The EPA notes that Congress provided different statutory deadlines for submission of attainment plans under subpart 1 and subpart 4. Under section 172(b) of the CAA, the EPA is directed to establish the date for the attainment plan submission, but it can extend no later than 3 years from the date of a nonattainment designation. By contrast, under CAA section 189(a)(2)(B), the statute provides that states must make the attainment plan submissions within 18 months after designation. Due to the December 2013 court decision in *NRDC* v. *EPA,* however, the EPA promulgated an alternative submission date of December 31, 2014, for attainment plans for the 1997 $PM_{2.5}$ and 2006 $PM_{2.5}$ NAAQS in order to provide a reasonable, prospective due date for attainment plans that must comply with subpart 4 requirements and to clarify the requirements that a state must meet prior to redesignation of a $PM_{2.5}$ nonattainment area. *See* 79 FR 31566 (June 2, 2014).

B. Emissions Inventory Requirements

1. Summary of Proposal

In the proposal, the EPA proposed for both Moderate and Serious areas to require both a "base year inventory for the nonattainment area" and an "attainment projected inventory for the nonattainment area." The proposal spelled out a list of requirements for each of these inventories. The proposal also specified, based on the timing requirements of CAA section 172(b), that the emissions inventories required for a Moderate area must be submitted within 18 months after the effective date of the designation of the nonattainment area.

The EPA proposed that the base year inventory for the nonattainment area: (a) Be required to represent one of the 3 years used for designations or another technically appropriate year; (b) include actual emissions of all sources within the nonattainment area; (c) be annual total or average-season-day emissions in accordance with the NAAQS violation(s) (annual and/or 24-hour); (d) include direct $PM_{2.5}$ (filterable and condensable) as well as all scientific $PM_{2.5}$ precursors; (e) follow the Air Emissions Reporting Requirements (AERR), 40 CFR part 51, subpart A for the emissions thresholds for point sources; (f) use the level of detail as prescribed by the AERR; and (g) still meet the public review requirements even if submitted as a separate plan.

The EPA further proposed that the attainment projected inventory for the nonattainment area (a) be required to represent projected emissions in the first year for which attainment is demonstrated by the modeled attainment demonstration; (b) include projected emissions of the same sources included in the base year inventory for the nonattainment area; (c) use the same temporal period as the base year inventory (annual or average-season-day); (d) include the same pollutants as the base year inventory; (e) report as point sources the same sources treated as point sources in the base year inventory; (f) be consistent in inventory detail with the base year inventory; and (g) still meet the public review requirements even if submitted as a separate plan.

2. Final Rule

The final regulations at 51.1008 provide the inventory requirements for Moderate areas. The EPA received a number of comments on the emissions inventory requirements for Moderate areas. Commenters both supported the provisions of the proposed rule and objected to some aspects of the inventory requirements. The EPA is finalizing all of the proposed Moderate area requirements with some modifications based on comments. Specifically, the definition of what can constitute a seasonal inventory has been made more flexible to accommodate certain cases, as explained in Section IV.B.2.c of this preamble.

Pursuant to its authority under section 110 of title I of the CAA, the EPA has long required states to submit inventories of the emissions of criteria pollutants and their precursors. The EPA codified these requirements in 40 CFR part 51, subpart Q in 1979 and amended them in 1987. Additionally, the 1990 CAA Amendments revised many of the provisions of the CAA related to attainment of the NAAQS and the protection of visibility in mandatory Class I federal areas (certain national parks and wilderness areas). These revisions established new emissions inventory requirements applicable to areas that were designated nonattainment for certain pollutants. In the case of PM, Congress did not create a specific emissions inventory requirement in subpart 4 that would supersede the emissions inventory requirement under subpart 1. Thus, the CAA section 172 (c)(3) emissions inventory requirements continue to apply, and that provision explicitly requires "a comprehensive, accurate, and current inventory of actual emissions of the relevant pollutants" in the nonattainment area. In addition, the specific attainment plan requirements for the $PM_{2.5}$ NAAQS set forth in CAA section 189(a) and associated modeling requirements make an accurate and up-to-date emissions inventory a critical element of any viable attainment plan. Because of the nature of $PM_{2.5}$, the EPA concludes that the statutory requirements for emissions inventories need further elaboration through additional regulatory requirements as described later.

Emissions inventory data serve as the foundation for various types of analyses performed by states and by the EPA. For example, these data enable states to evaluate the degree to which different emissions sources contribute to the nonattainment problem in a given nonattainment area and enable states to estimate the air quality improvement that can be achieved through different control measures. States should use the best available, current emissions inventory information for attainment plan development, because high quality emissions inventory data are essential for the development of an effective control strategy. To assist states in preparing complete, high quality inventories, the EPA provides guidance for developing emissions inventories called "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze," which is available from *https://www.epa.gov/air-emissions-inventories/emissions-inventory-guidance-documents.* This guidance is commonly called the "SIP Emissions Inventory Guidance." The EPA recommends that states consult this guidance while developing the emissions inventories to meet statutory and regulatory requirements.

a. Inventory Requirements. As explained in the proposed rule, CAA section 172(c)(3) requires states to submit an emissions inventory and periodic revisions thereof with an attainment plan. 80 FR at 15363. In addition, pursuant to CAA section 301, the EPA has authority to promulgate regulations as necessary for the implementation of the $PM_{2.5}$ NAAQS, including requirements pertaining to emissions inventories. In this final action, the EPA is establishing several different inventory requirements that the agency has determined are necessary for the proper implementation of the $PM_{2.5}$ NAAQS in attainment plans.

There are three key facets of the emissions inventory requirements, as described later: (i) The type of inventories required; (ii) the timing of submission of these inventories; and (iii) the content of these inventories. These content requirements are described in this section; however, the EPA's rationale for these content requirements is in some cases further described in subsequent sections of this document.

First, states must submit at least two separate and distinct nonattainment area emissions inventories as elements of an attainment plan. The first emissions inventory is relevant for assessing the current or base year emissions from sources located in the nonattainment area; the second emissions inventory is a projected inventory relevant for assessing emissions in the target attainment year in the nonattainment area. The first type of inventory is called the "base year inventory for the nonattainment area," and the second type of inventory is called the "attainment projected inventory for the nonattainment area." *See* 40 CFR 51.1000. The base year inventory for the nonattainment area is necessary for development and evaluation of various elements of the attainment plan, such as the determination of appropriate pollutants, sources, and emission controls addressed in other elements of the attainment plan for the nonattainment area. The attainment projected inventory is necessary to implement the attainment demonstration requirement of CAA section 189(a)(1)(B), and it also may be used as part of meeting the RFP requirement (*see* Section IV.F of this preamble). The need for the attainment projected inventory also stems from the need for both the EPA and the public to be able to compare, during their reviews of the attainment plan, the base year inventory against the attainment projected inventory for the nonattainment area. For these reasons, this rule establishes a regulatory requirement at 51.1008 that Moderate area attainment plans must include a base year inventory for the nonattainment area and an attainment projected inventory for the nonattainment area.

Second, as noted in Section IV.A of this preamble, to meet the statutory requirements for submission of certain attainment plan elements required under subpart 4, the EPA believes that states must meet the same submission schedule for emissions inventories as for the other elements of an attainment plan, *i.e.,* within 18 months after the effective date of the designation of the nonattainment area. This schedule must apply to both of these emissions inventories because they are necessary for effective evaluation of the attainment plan as a whole. Consequently, under the authority of CAA section 172(b), this rule establishes a regulatory requirement for Moderate areas that states must submit the required base and projected emissions inventories by 18 months after designation.

Third, the EPA is establishing specific requirements for both the base year inventory for the nonattainment area and for the attainment projected inventory for the nonattainment area in order to implement the $PM_{2.5}$ NAAQS most effectively. Accordingly, this final rule requires that the base year inventory for Moderate nonattainment areas must meet the following minimum criteria 1 through 7:

(1) The inventory year must be one of the 3 years used for designations for the relevant $PM_{2.5}$ NAAQS or another technically appropriate inventory year. Another inventory year may be chosen under specific circumstances (*e.g.,* to account for a change in sources in the nonattainment area, changes in nonattainment area boundaries, to allow the base year to be consistent with the base year needed for the conformity rule, or significant time lag between designations and preparation of the inventory) with consultation from the appropriate EPA Regional Office. This requirement is intended to ensure that the inventory will adequately represent the emissions sources that contributed to the nonattainment designation for the area. *See* 40 CFR 51.1008(a)(1)(i).

(2) The inventory must include actual emissions of all sources within the nonattainment area. This requirement stems directly from the language in CAA section 172(c)(3). Sources outside of the nonattainment area are explicitly not included in the section 172(c)(3) requirement with the words "in such area." Furthermore, the EPA interprets the Act requirement for "actual emissions from all sources" in CAA section 172(c)(3) as intending to include all emissions that may contribute to the formation of $PM_{2.5}$ within the nonattainment area. This means that the inventory must include point sources, stationary nonpoint sources,[56] mobile sources, prescribed fires and wildfires. The EPA encourages states and tribes to work together to ensure that the information used in developing the base year inventory for the nonattainment area is inclusive of all emissions from the designated nonattainment area, including emissions from sources in tribal areas located therein. *See* 40 CFR 51.1008(a)(1)(ii).

(3) The emissions must be reported as annual total emissions, average-season-day emissions, or both, as appropriate for the relevant $PM_{2.5}$ NAAQS. The rationale for the type(s) of emissions provided must be included as part of the attainment plan. When seasonal emissions are included, the rationale for the seasonal period must also be included as part of the attainment plan. A discussion of the EPA's rationale for including the option of seasonal or annual inventories is provided in Section IV.B.2.c of this preamble. *See* 40 CFR 51.1008(a)(1)(iii).

(4) As discussed earlier and consistent with past implementation rule requirements, the inventory must include emissions of direct $PM_{2.5}$ (both filterable $PM_{2.5}$ and condensable $PM_{2.5}$, provided as separate components), as well as all scientific $PM_{2.5}$ precursors (SO_2, NO_X, VOC and ammonia). A discussion of the EPA's rationale for including this requirement is provided in Section IV.B.2.d of this preamble. *See* 40 CFR 51.1008(a)(1)(iv).

(5) States must follow the Air Emissions Reporting Requirements (AERR), 40 CFR part 51, subpart A criteria for emissions thresholds for states to use to determine which emissions sources must be reported as point sources. This requirement is consistent with past implementation rules and is needed to specify whether emissions must be submitted as specific major source stationary facilities with detailed emissions processes or whether emissions can be provided as county totals (*i.e.,* area sources, also called nonpoint sources). A discussion of the use of 40 CFR part 51, subpart A for the emissions thresholds is provided in Section IV.B.2.e of this preamble. *See* 40 CFR 51.1008(a)(1)(v).

(6) The level of detail of the emissions included in the inventory must be consistent with the detail required by 40 CFR part 51, subpart A. For example, all emissions must be subdivided to individual emissions processes within a facility or county. While these details should underlie the emissions

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[56] Point sources are the same as major stationary sources, and the term indicates sources that must be reported at an individual facility with process-level details. Nonpoint sources are all other stationary sources, and the term indicates sources that are reported as a county total. The definitions for this rule (*see* 51.1000) refer to the definitions in the AERR (40 CFR part 51, subpart A). Nonpoint sources include minor sources, synthetic minor sources, and area sources such as residential heating and other sources where it is not realistic to estimate emissions from each emissions point.

inventory, this information can be summarized for other elements of the attainment plan. This requirement is consistent with the remanded 2007 $PM_{2.5}$ Implementation Rule and is needed to define the data reporting elements (*i.e.,* how they are reported) as opposed to the emissions values (*i.e.,* how much emissions derive from each source or source category) of the emissions inventories submitted to the EPA. *See* 40 CFR 51.1008(a)(1)(vi).

(7) If the base year inventory for the nonattainment area is submitted to the EPA as a separate plan submission (*i.e.,* severed from the overall attainment plan and provided separately), the inventory must still meet the notice and public hearing requirements of CAA sections 110(a)(1) and 110(a)(2).

For the attainment projected inventory for Moderate nonattainment areas, this final rule also establishes specific requirements necessary to implement the $PM_{2.5}$ NAAQS effectively. Accordingly, the attainment projected inventory must meet the following minimum criteria 1 through 7:

(1) The year of the projected inventory must be the most expeditious year for which projected emissions show modeled $PM_{2.5}$ concentrations below the level of the NAAQS, consistent with the requirement for expeditious attainment by no later than the applicable deadlines provided in the statute. *See* 40 CFR 51.1008(a)(2)(i).

(2) The emissions must be projected emissions from the same sources included in the base year inventory for the nonattainment area and any new sources projected to locate within the boundaries of the nonattainment area. The projected emissions should be the best available representation of expected emissions, and thus should take into account emissions growth and contraction, facility closures, new facilities, new controls and other changes in emissions forecast to occur between the base year and the attainment year. In deciding what factors are relevant, states should consider factors affecting projected emissions that could significantly alter the conclusions of the modeled attainment demonstration. *See* 40 CFR 51.1008(a)(2)(ii). For prescribed and wildfire emissions, Section IV.D.3.b of this preamble describes in more detail the appropriate way to handle these sources in the attainment projected inventory.

(3) The temporal period of emissions must be the same temporal period (annual, average-season-day, or both) as the base year inventory for the nonattainment area. *See* 40 CFR 51.1008(a)(2)(iii).

(4) Consistent with the base year inventory for the nonattainment area, the inventory must include all emissions of direct $PM_{2.5}$ (both filterable and condensable $PM_{2.5}$ provided as separate components), as well as all emissions of the scientific precursors (SO_2, NO_X, VOC and ammonia). *See* 40 CFR 51.1008(a)(2)(iv).

(5) The same sources reported as point sources in the base year inventory for the nonattainment area must also be provided as point sources in the attainment projected inventory for the nonattainment area. Likewise, nonpoint and mobile source projected emissions must also be provided using the same delineations as the base year inventory. *See* 40 CFR 51.1008(a)(2)(v).

(6) The detail of the emissions included must be consistent with the level of detail in the base year inventory (*i.e.,* as required by 40 CFR part 41, subpart A). *See* 40 CFR 51.1008(a)(2)(vi).

(7) If the attainment projected inventory for the nonattainment area is submitted to the EPA as a separate plan submission (*e.g.,* severed from the overall attainment plan and provided separately), then the inventory must still meet all the notice and public hearing requirements of CAA sections 110(a)(1) and 110(a)(2).

b. *Comparison to Inventory Requirements from Earlier $PM_{2.5}$ Implementation Rules.* The 2007 $PM_{2.5}$ Implementation Rule required states to submit specific emissions inventories in connection with the RFP requirements of CAA section 172(c)(2) under subpart 1. In this rule, no specific RFP related inventory is required, but the attainment projected inventory for the nonattainment area also may serve a purpose for evaluation of RFP. Past EPA guidance with respect to RFP requirements under subpart 4 has not explicitly required a separate emissions inventory for this purpose for PM_{10} NAAQS. Through evaluation of the RFP requirement in connection with this rulemaking, however, EPA has determined that there may be circumstances in which such an approach may be appropriate. For this reason, the EPA describes this issue more fully in Section IV.F of this preamble.

The 2007 $PM_{2.5}$ Implementation Rule also required states to submit a statewide base year emissions inventory as part of the attainment plan. The EPA included the statewide emissions inventory requirement because it was relevant to evaluation of emissions reductions from sources outside of the designated nonattainment area for purposes of RFP. The EPA no longer interprets the CAA to allow such reductions for purposes of RFP, so this particular form of emissions inventory is not needed for attainment plan for the $PM_{2.5}$ NAAQS. Furthermore, statewide inventories are already required as part of the AERR (40 CFR part 51, subpart A) on a triennial basis. While these inventories do not receive the same level of scrutiny as inventories associated with attainment plans, the EPA believes that this existing statewide inventory requirement is sufficient for understanding the $PM_{2.5}$ nonattainment contributions from areas outside of the nonattainment area, which is a necessary component of modeled attainment demonstrations described in Section IV.E of this preamble.

c. *Seasonal Inventories.* The statute does not explicitly address whether the emissions inventory required under CAA section 172(c)(3) should include emissions throughout an entire calendar year or emissions during some shorter portion of the year that may be appropriate for implementation of a particular NAAQS. In the case of the $PM_{2.5}$ NAAQS, the standards currently include both annual NAAQS and 24-hour NAAQS. With respect to the annual NAAQS, the form of the NAAQS includes monitored ambient $PM_{2.5}$ values at all times throughout the course of the year, and thus an annual emissions inventory is necessarily required for development of an appropriate attainment plan for a given area. In the case of the 24-hour NAAQS, however, the form of the NAAQS is based upon monitored values on particular days with high levels of ambient $PM_{2.5}$, and in some nonattainment areas those days may occur only during a distinct and definable season of the year. The EPA considers it appropriate to interpret the emissions inventory requirements of the CAA in light of the specific inventory needs that are relevant for the NAAQS in question. For the $PM_{2.5}$ NAAQS, states can meet the inventory requirement with different combinations of temporal resolutions for the emissions. For the annual standard, annual emissions must be submitted. For the 24-hour standard, states must submit either an annual or an average-season-day inventory and optionally may submit both. For a nonattainment area for both the annual and 24-hour standard, states can meet the inventory requirement with only an annual inventory or with both an annual and average-season-day inventory.

In contrast with the annual $PM_{2.5}$ NAAQS, the 24-hour $PM_{2.5}$ NAAQS are designed to protect against peak exposures. Thus, for the 24-hour $PM_{2.5}$

NAAQS, there are circumstances in which the EPA believes that only seasonal emissions inventories may be useful for attainment planning purposes. This rule at 40 CFR 51.1008(a)(1)(iii) allows states to use seasonal inventories for attainment plan development for attaining the 24-hour $PM_{2.5}$ standard in areas that are designated nonattainment for only the 24-hour standard. Use of a seasonal emissions inventory will also be appropriate only if the monitored violations of the 24-hour $PM_{2.5}$ NAAQS in the area occur during an identifiable season. In the event that it is appropriate to rely on a seasonal emissions inventory, the state should confer with the EPA concerning the exact length of the season and the start and stop dates of the season. The duration and start and stop dates of the season will be an important component of the attainment plan and must be approved by the EPA along with other elements of the attainment plan for a given nonattainment area. Further, this rule requires that seasonal inventories must use average-season-day emissions values for this purpose, defined by 40 CFR 51.1000. The nature of some seasonal $PM_{2.5}$ emissions sources (*e.g.,* residential wood combustion) does not allow for only weekday emissions to be included in the inventory, therefore all days must be included. The state would need to explain the rationale for the duration of the season used for the inventory as part of the attainment plan submission. To justify the use of a seasonal emissions inventory, the state must demonstrate why a seasonal emissions inventory is appropriate for the particular $PM_{2.5}$ nonattainment area in question.

Commenters recommended that the EPA should allow episode-specific inventories, in lieu of seasonal inventories. As a result, the EPA acknowledges in this final rule that, for some source categories, it may be advisable to limit the "season" considered in calculating emissions to an episodic period to reflect periods of higher emissions during periods of high ambient $PM_{2.5}$. Such an approach could help to ensure the nonattainment area inventory reflects the emissions conditions that led to an initial nonattainment area designation. For example, if nonattainment conditions are associated only with periods of peak emissions from residential wood combustion, then an episodic average for residential wood combustion may be more appropriate than a seasonal average. The resulting seasonal emissions inventory would then have a mix of the seasonal averages as defined by 40 CFR 51.1000 for most categories, but using a shorter period for the emissions categories that can be justified and an improvement. In such cases, in addition to the requirement to justify the seasonal period, the state must additionally justify the factual basis for the period used to calculate emissions from such categories, and this would be subject to EPA approval. While the EPA encourages using the same averaging period for all sectors for purposes of simplicity, an episodic averaging period may only be needed for a select group of sources or even for a single category of sources. Those special cases must be explained in the emissions inventory part of the state implementation plan [*see* 40 CFR 51.1008(a)(1)(iii)]. For the purposes of the definitions included in this final rule, all non-annual emissions (whether seasonal or episodic) will be referred to as "seasonal" in this rule.

d. *Pollutant Requirements.* This rule requires that states must submit emissions inventories that include all emissions of direct $PM_{2.5}$ and all emissions of scientific $PM_{2.5}$ precursors: SO_2, NO_X, VOC and ammonia. Furthermore, the inventories must differentiate between the condensable and filterable portions of direct $PM_{2.5}$ emissions, and states must provide this information in the emissions inventories as separate components. As described in Section IV.B.3 of this preamble, commenters disagreed with the EPA's proposal to require inclusion of ammonia emissions and to require separate reporting of condensable and filterable emissions. The approach being finalized in this rule does not differ from the EPA's proposal despite these adverse comments.

Section II.B of this preamble describes the background needed to understand the importance of including these precursors in emissions inventories for attainment plan purposes for the $PM_{2.5}$ NAAQS. Emissions information about $PM_{2.5}$ and its precursors is a necessary precondition to meeting other core attainment plan requirements, such as effective evaluation of control measures and adequate demonstration of projected future attainment of the NAAQS through modeling. The EPA notes that, with respect to requiring states to include emissions of direct $PM_{2.5}$ and $PM_{2.5}$ precursors in emissions inventories, the agency is following the requirements it established for the 2007 $PM_{2.5}$ NAAQS Implementation Rule in the past.[57] Section 172(c)(3) of the CAA explicitly requires states to submit a "comprehensive, accurate, current inventory of actual emissions of the relevant pollutants" and the EPA continues to believe that to meet these basic statutory requirements for the $PM_{2.5}$ NAAQS, states must address $PM_{2.5}$ and all $PM_{2.5}$ precursors in their emissions inventories.

The EPA requires states to use the best available methodologies for estimating emissions of $PM_{2.5}$ and its precursors.

e. *The AERR Defines the Thresholds, Data Elements and Data Methods.* Because the provisions of the CAA do not specify the form of the emissions information to be reported to the EPA for meeting the attainment plan inventory requirement under CAA section 172(c)(3), it is necessary for the EPA to prescribe specifically the data elements of that emissions inventory and the attainment projected inventory. The EPA uses the AERR to define basic requirements/parameters of reporting emissions for all pollutants. This approach creates consistency and eases the burden for the states, because states have one basic set of rules that apply to all emissions they have to report to the EPA.

Distinct from the emissions *values* (*i.e.,* how much emissions derive from each source or source category), the emissions *elements* (*i.e.,* how they are reported) refer to the reporting definitions, data codes and required data fields. Under this final rule, states must use the emissions elements from 40 CFR part 51, subpart A in preparing their inventories to be submitted to the EPA for implementing the $PM_{2.5}$ NAAQS. It also requires that states use point source thresholds from Appendix A of the same subpart. This is consistent with past requirements for the form of emissions inventories.

In addition to defining the point source thresholds and data elements, 40 CFR part 51, subpart A also requires states to submit emissions information to the EPA. The EPA is not referring to those emissions submission requirements here, but rather to the emissions elements—the definitions, data codes and required data fields. Later, the EPA addresses the issue of whether the emissions values submitted through the AERR are relevant to the inventory requirements of this final rule (*see* Section IV.B.2.g of this preamble).

As noted earlier, the EPA recommends that states consult the SIP Emissions Inventory Guidance in preparing the inventories required by this rule. In addition to the AERR, this guidance includes definitions for data fields that are not required by the AERR, such as seasonal emissions values and other fields that are optional in the AERR data collection system. The EPA is updating the SIP Emissions Inventory Guidance in coordination with this final rule. It provides specific guidance to states on how to develop base year inventories for the nonattainment area and attainment projected inventories for 8-hour ozone, $PM_{2.5}$, and regional haze SIPs. While the AERR sets forth requirements for data elements and definitions, the guidance complements these requirements, defines all data elements (even those that are voluntary AERR elements), and indicates how states should prepare and document the data for attainment plan submissions.

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[57] 72 FR 20647 (April 25, 2007).

In the case of prescribed fires and wildfires, the AERR no longer requires those categories to be submitted, but rather the emissions data can be optionally provided as an "Event" source, which is a day-specific source at a point location. For this rule as described earlier, states are required to include prescribed fires and wildfires for the base year inventory for the nonattainment area and the attainment projected inventory for the nonattainment area. For this rule, states are not expected to use the "Event" detail to meet their inventory reporting requirements. Instead, states can report these fire emissions by county as nonpoint sources are reported.

f. *Emissions Inventories for Support of Modeled Attainment Demonstrations.* This section clarifies the difference between the inventories required to be a part of a state's Moderate area attainment plan submission (as described earlier) and other modeling inventories that are also relevant for attainment planning. While the EPA is not establishing additional modeling inventory requirements in this rule (*i.e.,* for which a state must submit an emissions inventory to the EPA), to meet the attainment demonstration requirements of CAA sections 189(a)(1) and 189(b)(1), states are required to submit either an attainment demonstration (which includes air quality modeling) to show how the area will attain the NAAQS by the applicable attainment date or a demonstration that the area cannot attain by the attainment date. The modeled attainment demonstration requirements for Moderate areas are described fully in Section IV.E of this preamble.

As part of the modeled attainment demonstration, the EPA presumes that states will need to prepare attainment demonstration modeling inventories for both a modeled base year and projected attainment year. Respectively, these are called the "base year (baseline) inventory for modeling" and the "attainment projected inventory for modeling." These inventories contain emissions for all regions (*i.e.,* not just from sources in the nonattainment area) within the modeling domain being used for the attainment plan modeling demonstration, which typically includes counties and even states outside of the nonattainment area. They include detailed spatial and temporal elements needed to support air quality modeling. States should follow the requirements laid out in Section IV.E of this preamble and the procedures described in the SIP Emissions Inventory Guidance and the Air Quality Modeling Guidance to meet the minimum requirements for documentation and emissions summaries supporting modeling demonstrations.

The base year inventory and projected attainment year inventory include emissions from only within the nonattainment area. The EPA expects that modeling inventories will be consistent with those nonattainment area inventories; however, some exceptions may exist. Where possible, the nonattainment area base year and projected attainment year inventories can be a sum (for annual data) or average (for $PM_{2.5}$ season-day data) of day-specific or hour-specific data used for modeling. In some cases, however, annual or season-day data may not be sufficient for modeling purposes. For example, greater spatial detail (gridded rather than county total) and temporal detail (hourly rather than annual) are needed for on-road mobile modeling inventories as compared to the base year inventory for the nonattainment area. Rather, for the nonattainment area base year inventory, one goal is to allow for the repeatability of the approach in order to create average-season-day or annual inventories to help meet other attainment plan requirements, such as RFP or motor vehicle emissions budgets established for transportation conformity purposes. That goal is not necessarily compatible with the modeling need for greater spatial and temporal detail, which requires much greater effort and expense than is practical for RFP or establishing motor vehicle emissions budgets. In cases where some differences are unavoidable, states should attempt to promote consistency where feasible.

g. *Using AERR (40 CFR part 51, subpart A) Inventory Submission to Meet the Requirement for the Base Year Inventory for the Nonattainment Area.* The AERR includes both triennial and annual statewide reporting requirements, with more extensive reporting requirements for triennial inventory years. All AERR submissions are required to be made electronically. For the interim annual inventories, reporting is limited to emissions data from only the larger point sources (Type "A" sources), as defined by Appendix A of 40 CFR part 51, subpart A. For the triennial inventories, lower point source thresholds are given in Appendix A, consistent with the definition of major sources in 40 CFR part 70, and data from all other sources of emissions must be reported as from either nonpoint or mobile sources on a county basis.

In the past, some states have incorrectly asserted that their AERR submission meets the requirements for base year inventories required by other implementation rules. To avoid confusion, the EPA explains here the limited circumstances under which the AERR emissions inventories will be considered to meet the base year inventory requirement for Moderate nonattainment areas. The following conditions must be met to use AERR inventories for attainment planning:

(1) The AERR emissions inventory must have gone through the notice and public hearing requirements of CAA sections 110(a)(1) and 110(a)(2).

(2) The AERR emissions inventory includes all sources of emissions and all pollutants required for the base year inventory for the nonattainment area. This is only possible if the year for the base year inventory for the nonattainment area aligns with a triennial AERR year, because the data system implementing the AERR only accepts emissions from point sources and not other source categories in non-triennial years.

(3) The EPA's inventory data system must be accepting data for the inventory year being submitted. Inventories are allowed to be submitted to the AERR for a given year for only a limited time during the development cycle of the National Emissions Inventory.

(4) The AERR submission must include emissions from all sources required for the base year inventory for the nonattainment area consistent with 40 CFR 51.1008(a)(1), and must include mobile source emissions in nonattainment areas (instead of simply providing inputs or other data that is allowed under the AERR). In some cases, the AERR requirement can be met without actually "submitting" emissions; for example, states may elect to accept the EPA estimates for some nonpoint emissions sectors. Accepting EPA emissions does not meet the requirements of CAA section 172(c)(3) or this rule. In addition, the AERR revision finalized in February 2015 (80 FR 8787) replaces the prior requirement of reporting onroad mobile and nonroad

mobile source emissions with a requirement for reporting the input parameters that can be used to run the EPA models to generate the emissions. If choosing to use an AERR submission to meet the base year inventory for the nonattainment area requirement, the state should submit the nonattainment area emissions, irrespective of the options provided to meet the AERR requirements. Because the "statewide" emissions are actually provided for individual point sources and counties, the EPA believes that the AERR submission can be sufficient for most $PM_{2.5}$ nonattainment areas.

h. Mobile Source Emissions Models. A key part of emissions inventory development includes estimating mobile source emissions. For all of the mobile source inventories used for $PM_{2.5}$ NAAQS implementation, states should use the latest emissions models available at the time that the attainment plan inventory is developed.[58] In general, for states other than California that choose to fulfill various modeling requirements by using the latest EPA emissions model, the latest approved version of the MOVES model should be used to estimate emissions from onroad transportation sources. States should use the latest available planning emission inputs including, but not limited to, vehicle miles traveled (VMT), speeds, fleet mix, SIP control measures and fuels. The current version of MOVES is available at *http://www.epa.gov/otaq/models/moves/index.htm.* The appropriate EPA-approved model(s) should similarly be used for California onroad source emissions.[59]

When using MOVES, states should follow the most current version of the MOVES Technical Guidance, available at *http://www.epa.gov/otaq/models/moves/index.htm.* MOVES includes multiple options for estimating and processing emissions that could result in different emissions inventories. The EPA recommends that states use the same approach in any analysis that compares two or more emissions cases (*e.g.,* different control scenarios, different years). If different approaches are taken for inventories that serve different purposes (for example, between inventories developed for air quality modeling, which may require greater temporal and spatial detail, and inventories used as the motor vehicle emissions budget), states should seek to understand and minimize any differences in results. For example, an approach may be used for the modeled attainment demonstration that uses gridded temperatures and other meteorological data, but this approach could be too burdensome for use in the base year inventory for the nonattainment area. If a state chooses to use MOVES to create emissions inventories for purposes of RFP and establishing motor vehicle emissions budgets for transportation conformity purposes, it must use the same MOVES approach in the base year inventory for the nonattainment area, and using a straightforward MOVES approach without gridded meteorology is more reasonable for that purpose.

Likewise, if states choose to fulfill various inventory requirements by using the latest EPA emissions model, the most current version of the NONROAD model or its successor must be used for estimates of nonroad mobile source emissions, preferably with state-supplied model input data. States can alternatively develop technologically equivalent or superior state-specific nonroad emissions estimates, but should explain why their approach gives a better estimate than the EPA model. For nonroad sources not estimated by the NONROAD model, the best available methods should be used, and the EPA recommends that states refer to the SIP Emissions Inventory Guidance for more information on emissions from these sources. Links to **Federal Register** documents and policy guidance memos on the latest approved versions of MOVES and NONROAD can be found at *http://www3.epa.gov/otaq/models.htm.*

3. Comments and Responses

Comment: Several commenters pointed out the uncertainties associated with ammonia emissions and organic matter emissions from livestock and fertilizer application sources, including in data developed by the EPA such as the National Emissions Inventory. Commenters pointed to the data available through the National Air Emissions Monitoring Study (NAEMS) for use in developing improved ammonia estimation approaches from livestock activities, and asserted that the EPA cannot move forward with SIP implementation requirements that implicate livestock and poultry farmers without using the NAEMS data. The commenters stated that not only is this technically unsound, but that the idea of moving forward on regulating livestock operations without the most critical tool for establishing requirements is a violation of the spirit of the consent agreements[60] and the NAEMS.

Response: The EPA acknowledges that there is some uncertainty in quantifying ammonia emissions and other $PM_{2.5}$ precursors from source categories such as livestock and fertilizer application. This uncertainty extends to the emissions and chemical composition of VOC and $PM_{2.5}$, which also have an impact on ambient $PM_{2.5}$. These uncertainties have an impact on attainment demonstrations because they cause uncertainty in the modeling done to demonstrate future attainment of the $PM_{2.5}$ standard. However, the EPA disagrees with the assertion that these uncertainties should eliminate certain pollutants from consideration for control measures or should slow progress on attainment planning.

Emissions uncertainty is a fact of air quality planning and cannot be avoided. Despite uncertainties in inventories of all kinds throughout the NAAQS program, great progress in improving air quality has been made through the attainment planning process and the implementation of control measures selected in part based on modeled attainment demonstrations. While emissions uncertainties remain, enough information is available for $PM_{2.5}$ implementation planning purposes. The requirements contained in this final rule may drive further improvements in our understanding of emissions, and while the EPA strives to provide approaches for estimating emissions from a variety of source categories, the CAA places the burden for developing accurate emissions inventories on the states. The CAA does not allow for implementation of the NAAQS to be put on hold until all emissions uncertainties are eliminated. In fact, in spite of numerous uncertainties, states have developed emissions inventories for $PM_{2.5}$ and $PM_{2.5}$ precursors and performed modeling for $PM_{2.5}$ attainment demonstrations for the previous 1997 and 2006 NAAQS over the last 10 or more years.

Updated emissions estimating methodologies for animal feeding operations are under development using data collected during the period 2007–2009 from representative operations pursuant to the National Air Emissions

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[58] Section 172(c)(3) of the CAA requires that emission inventories be based on the most comprehensive, accurate and current information available. To do so, air agencies should use the most up to date method for estimating emissions.

[59] At this time, the California onroad mobile model is called EMFAC2014.

[60] In 2005, the EPA offered animal feeding operations (AFOs) an opportunity to participate in a voluntary consent agreement referred to as the Air Compliance Agreement. Under the Agreement, participating AFOs provided the funding for the National Air Emissions Monitoring Study (NAEMS)—a 2 year, nationwide emissions monitoring study of the animal confinement structures and manure storage and treatment units in the broiler, egg-layer, swine, and dairy industries (*see* 70 FR 4958).

Monitoring Study.[61] For the 2008 and 2011 national emission inventories, the EPA compiled state and county-level ammonia emissions estimates using information from state and local governments, the USDA Census of Agriculture and National Agriculture Statistical Service, and from existing ammonia emissions models. A new approach in development for use in the 2014 NEI uses the NAEMS data to improve the EPA's approach for estimating county-total emissions. The EPA expects that this update and other uses of the NAEMS data will help to reduce uncertainties in current ammonia inventories and will improve the quality of future emissions inventories needed for implementing the $PM_{2.5}$ NAAQS. The EPA disagrees that implementation planning should wait until NAEMS results are fully available. The EPA continues to make progress in using these data; however, the full use and implementation of new methods based on these data is not a prerequisite for progress on considering ammonia as a $PM_{2.5}$ precursor for the NAAQS implementation purposes. Moreover, in order for a state to demonstrate a precursor's insignificance (as necessary under this rule before excluding it from certain control or planning requirements), in some cases it may need to move forward without waiting until the NAEMS results are fully available. The EPA and USDA are continuing to work collaboratively to better understand agricultural ammonia related emissions in order to more accurately represent the emissions and impacts of ammonia in relation to $PM_{2.5}$.

Comment: Commenters supported the EPA's proposed approach to require distinct emissions for filterable and condensable $PM_{2.5}$. Commenters asserted that this proposed requirement created an additional inventory requirement beyond what is already required in the AERR. Commenters also asserted that this requirement places an unnecessary burden on states and industry.

Response: The EPA disagrees with the assertion that an additional inventory requirement has been imposed by this rule. Within the AERR, 40 CFR 51.15(a)(1)(vi) states (with regard to what must be reported): "*Primary $PM_{2.5}$. As applicable, also report filterable and condensable components.*" The term "also" implies "in addition to total primary $PM_{2.5}$," and the phrase "as applicable" is intended to mean when such emissions are emitted from the source. This requirement has been in place since 2008, providing ample time for states to ensure compliance with this reporting requirement in advance of this final rule. Furthermore, the EPA points out that it would be much more difficult for the EPA to assess (as part of evaluating an attainment plan) whether states have met the requirement to include condensable emissions, and thus a complete $PM_{2.5}$ inventory, without the states providing condensable emissions as something separate and distinct from filterable and total $PM_{2.5}$. In addition, having a complete emission inventory of filterable and condensable $PM_{2.5}$ emissions will enable a state to better identify contributing sources and develop a more effective plan.

The EPA also notes that new electric generating units that are subject to (40 CFR part 60, subpart Da) without PM continuous emissions monitors (CEMs) have to conduct annual testing for condensable PM using Method 202 of appendix M of part 51.

Comment: Some commenters supported the EPA's proposed approach to require an attainment projected inventory for the nonattainment area. Other commenters asserted that such an inventory should not be required because it has not been required before and because the attainment demonstration is sufficient.

Response: The EPA disagrees with the latter commenters, noting that the rationale that such inventories have not been required before is not in and of itself a reasonable basis on which to exclude such a requirement now. The purpose of these inventories is well justified by the need for both the EPA and the public to be able to compare, during their reviews of the attainment plan, the base year inventory to the attainment projected inventory. Without such information, it is extremely difficult for the EPA to assess the projected emissions changes in the nonattainment area that the state asserts contribute to attainment. The attainment projected inventory may also play a role in meeting the RFP requirements of this rule. Furthermore, while the EPA has not explicitly required submittal of an attainment projected inventory in regulation, many states have developed such future year inventories as part of attainment demonstrations and have submitted them as part of $PM_{2.5}$ attainment plans in the past, thus demonstrating their viability and utility.

Comment: Commenters supported the EPA's proposed approach to allow seasonal inventories. Some commenters requested the use of clear language stating an allowance for episode-specific inventories in lieu of seasonal inventories.

Response: The EPA agrees with the commenters that for some source categories, seasonally averaged winter conditions would not be sufficient to represent the conditions leading to violations of the 24-hour $PM_{2.5}$ standard. As described in Section IV.B.2.c of this preamble, some modifications have been made to the explanation of seasonal inventories to clarify that it would be reasonable to use an episodic average from the modeled attainment demonstration in some cases.

C. Pollutants To Be Addressed in the Plan

Under subpart 4 of the CAA, states are presumptively required to analyze and evaluate emissions reduction measures for all sources of direct $PM_{2.5}$ and $PM_{2.5}$ precursors (*i.e.*, SO_2, NO_X, VOC and ammonia) in developing $PM_{2.5}$ attainment plans. Direct $PM_{2.5}$ emissions include both filterable and condensable $PM_{2.5}$ emissions. *See* further discussion of filterable and condensable $PM_{2.5}$ emissions in the background section (Section II of this preamble) and in the emissions inventory requirements for Moderate area attainment plans (Section IV.B of this preamble). Thus, a state must evaluate control measures for sources of filterable and condensable $PM_{2.5}$ emissions as part of an approvable control strategy for a Moderate $PM_{2.5}$ nonattainment area.

With regard to $PM_{2.5}$ precursors, Section III of the preamble describes that the rule provides for the possibility that the state may demonstrate that nonattainment area emissions of a particular precursor may not make a significant contribution to $PM_{2.5}$ levels that exceed the standard in the area, or that emissions reductions of the precursor may not be needed for expeditious attainment. Thus, the rule presumptively requires the state to evaluate potential control measures for all four precursors, but the state may not need to address one or more requirements for a particular precursor with an approvable precursor demonstration.

D. Attainment Plan Control Strategy

1. Background on Attainment Planning and the Evaluation of Control Measures

a. Summary of Proposal. The proposal included an overview of the statutory requirements and general guidance associated with attainment planning and evaluation of control measures.

b. Final Rule. The following overview of statutory requirements and general guidance remains unchanged except as discussed in this final rule.

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[61] For more information on the NAEMS study, *see: http://www3.epa.gov/airquality/agmonitoring/.*

The attainment planning requirements of subparts 1 and 4 were established to ensure that two important CAA goals are met: (i) That states implement measures that provide for attainment of the $PM_{2.5}$ NAAQS as expeditiously as practicable, but not later than the statutory attainment date; and (ii) that states adopt effective emissions reduction strategies in nonattainment areas. The Moderate nonattainment area attainment date is as expeditiously as practicable, but not later than the end of the sixth calendar year after designation.

CAA section 172(c) of subpart 1 of the CAA describes the general attainment plan requirement for RACM and RACT, requiring that attainment plan submissions "provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment" of the NAAQS.[62] The attainment planning requirements in subpart 4 that are specific to PM_{10} (including $PM_{2.5}$) likewise impose upon states an obligation to develop attainment plans that require RACM and RACT for sources of direct $PM_{2.5}$ and $PM_{2.5}$ precursors within a Moderate nonattainment area. CAA section 189(a)(1)(C) requires that states with areas classified as Moderate have attainment plan provisions to assure that RACM/RACT are implemented by no later than 4 years after designation of the area.[63] The EPA reads CAA sections 172(c)(1) and 189(a)(1)(C) together to require that attainment plans for Moderate nonattainment areas must provide for the implementation of RACM and RACT for existing sources of $PM_{2.5}$ and $PM_{2.5}$ precursors in the nonattainment area as expeditiously as practicable but no later than 4 years after designation.[64] The terms RACM and RACT are not defined within subpart 4, nor do the provisions of subpart 4 specify how states are to meet the RACM and RACT requirements. However, the EPA's longstanding guidance in the 1992 General Preamble helps inform our interpretation of RACM and RACT for the purpose of implementing the $PM_{2.5}$ NAAQS.

The EPA's guidance on RACM for sources of PM_{10} and PM_{10} precursors under subpart 4 in the General Preamble and Serious area Addendum includes the following: (i) A recommended list of potential measures to reduce PM_{10} for states to consider; [65] (ii) an emphasis on state evaluation of the technological and economic feasibility of potential control measures to determine whether such measures are reasonably available for implementation; (iii) an expectation that the state will provide a reasoned explanation for a decision not to adopt a particular control measure, including those measures recommended to the state in public comments or at a public hearing; and (iv) a discussion that in some cases partial implementation of an emissions reduction program may be considered RACM when full implementation would be infeasible within the given Moderate area timeframe.[66] Thus, the RACM requirement under subpart 4 applies to all types of sources and is not focused only on forms of control that are technology-based.

With respect to RACT requirements, the EPA's guidance in the General Preamble includes the following: (i) RACT has historically been defined as "the lowest emission limit that a source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility"; (ii) RACT generally applies to stationary sources, both stack and fugitive emissions; (iii) major stationary sources (*i.e.,* sources with potential to emit 100 tons per year or more of direct $PM_{2.5}$ or any $PM_{2.5}$ precursor) should be the minimum starting point for a state's RACT analysis, but states are recommended to evaluate RACT for smaller stationary sources as needed for attainment and considering the feasibility of controls; [67] and (iv) it is possible that a State could demonstrate that an existing source in an area should not be subject to a control technology especially where such technology is unreasonable in light of the area's attainment needs, or such technology is infeasible. In such a case, it could be concluded that no control technology is "reasonably available," and RACT for the source could be considered to be no additional control.[68] Thus, the RACT requirement under subpart 4 is primarily focused on stationary sources and forms of emissions control that are technology-based.

The appendices to the General Preamble noted that reducing air emissions may not justify adversely affecting other resources, for example, by increasing pollution in bodies of water, creating additional solid waste disposal problems or creating excessive energy demands. An otherwise available control technology may not be reasonable if these other environmental impacts are sufficiently adverse and cannot reasonably be mitigated. A state may consider a control measure for direct $PM_{2.5}$ or a $PM_{2.5}$ precursor not reasonable if, considering the availability of mitigating adverse impacts of that control on pollution of other media, the control would not, in the state's reasoned judgment, provide a net benefit to public health and the environment. It should be noted that, in many past situations, states and owners of existing sources have adopted control technologies for direct $PM_{2.5}$ and/or $PM_{2.5}$ precursors with known energy penalties and some adverse effects on other media, based on the reasoned judgment that installation of such technology would result in a net benefit to public health and the environment. States should consider this before determining that a control technology is not reasonable because it may have other, negative environmental impacts that are on balance marginal.

This final rule specifies the basic requirements that states must meet in identifying and selecting the complete suite of measures needed for an attainment plan submission for a Moderate $PM_{2.5}$ nonattainment area. This preamble, together with the General Preamble, provides further description of the recommended process for states to follow in meeting these requirements. Under this process, the specific determination of RACM and RACT is to be made within the broader context of assessing control measures for all stationary, area and mobile sources of direct $PM_{2.5}$ and $PM_{2.5}$ precursors that would collectively contribute to meeting the Moderate area attainment date as expeditiously as practicable.[69]

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[62] Because in CAA section 172(c) the term "reasonably available control measures," or RACM, also includes "reasonably available control technology," or RACT, this document uses the abbreviation "RACM/RACT" to represent these requirements collectively, where appropriate.

[63] States with areas later reclassified as "Serious" nonattainment areas under subpart 4 must also develop and submit later plans to meet additional requirements for Serious areas. *See* 40 CFR 51.1003(b).

[64] This interpretation is consistent with guidance described in the General Preamble. *See* 57 FR 13498 (April 16, 1992), at page 13540.

[65] The appendices to the General Preamble, 57 FR 18070 (April 28, 1992), included sections on available fugitive dust control measures, available residential wood combustion measures, and available prescribed burning control measures.

[66] *See* 57 FR 13498 (April 16, 1992), at pages 13540–41. *See also* the Addendum.

[67] *Ibid.*

[68] *Ibid.*

[69] In *Sierra Club* v. *EPA,* 294 F.3d 155 (D.C. Cir. 2002), the court stated, in upholding the EPA's

The final rule requires that all moderate area plans contain RACM, which is defined as any technologically and economically feasible measure that can be implemented in whole or in part within 4 years after the effective date of designation of a $PM_{2.5}$ nonattainment area and that achieves permanent and enforceable reductions in direct $PM_{2.5}$ emissions and/or $PM_{2.5}$ precursor emissions from sources in the area. RACM includes reasonably available control technology (RACT). The EPA recommends that to meet this definition, the state should follow a process by which it first identifies all sources of emissions of direct $PM_{2.5}$ (including filterable and condensable $PM_{2.5}$) and all $PM_{2.5}$ precursors in the nonattainment area, and all potential control measures to reduce emissions from those source categories.[70] The state next determines if any of the identified potential control measures are not technologically feasible and whether any of the identified technologically feasible control measures are not economically feasible. Measures that are not necessary for attainment need not be considered as RACM/RACT.[71]

Measures that can only be implemented after the 4-year deadline for RACM and RACT, but before the end of the sixth calendar year following designation, are defined in the final rule as "additional reasonable measures."[72] The EPA has created this new definition based on the recognition that in some areas there could be emission reduction strategies that still could be implemented beginning 4 years after designation through the attainment date that could help to improve air quality and attain the standard expeditiously in the area. Note also that the state has discretion to require reductions from any source inside or outside of a $PM_{2.5}$ nonattainment area (but within the state's boundaries) in order to fulfill its obligation to demonstrate attainment in a $PM_{2.5}$ nonattainment area as expeditiously as practicable, and it may need to require emissions reductions on sources located outside of a $PM_{2.5}$ nonattainment area if such reductions are needed in order to provide for expeditious attainment of the $PM_{2.5}$ NAAQS.

Lastly, the final rule requires the state to perform an analysis (typically an air quality modeling analysis) to determine the earliest practicable attainment date for the area. This analysis should take into account projected emissions reductions associated with existing federal and state regulations, plus any additional reductions that would be achieved due to new control measures that would be needed for expeditious attainment.

In the case of a Moderate area that can demonstrate it can attain by the statutory attainment date without implementing all reasonably available control measures (*i.e.* RACM/RACT and additional reasonable measures), the state would not be required to adopt certain otherwise reasonable measures if the state demonstrates that collectively such measures would not enable the area to attain the standard at least 1 year earlier (*i.e.*, "advance the attainment date" by 1 year). The EPA has long applied this particular test to satisfy the statutory provision related to an area demonstrating attainment "as expeditiously as practicable."[73] The EPA continues to believe that this approach provides an appropriate degree of flexibility to a state to tailor its attainment plan control strategy to the actual attainment needs of a particular $PM_{2.5}$ nonattainment area. In the case of a Moderate area that cannot demonstrate that it will practicably attain by the statutory attainment date, the state would be required to evaluate potential control measures for sources in the nonattainment area and adopt all reasonable measures (*i.e.*, RACM and RACT, and any "additional reasonable measures").

The following sections of the preamble describe the steps of the control measure evaluation process in more detail, and include discussion of the consideration of public comments as appropriate.

2. Step 1: Identify Sources of Emissions

a. Summary of Proposal

The proposal stated that the identification of all sources of emissions of direct $PM_{2.5}$ (including filterable and condensable $PM_{2.5}$) and all four $PM_{2.5}$ precursors in the nonattainment area is the starting point for the state's analysis of potential control measures. It was noted that an exception to this comprehensive review requirement might be possible if the final rule includes a policy that would allow a state to demonstrate that one or more precursors in a nonattainment area do not significantly contribute to $PM_{2.5}$ levels that exceed the standard. If such a demonstration were approved by EPA, then the state would not be required to adopt control measures for the precursor.

The proposal also included discussion of a possible *de minimis* source category exemption concept for Moderate areas. Under the approach, the analysis and identification of "*de minimis* source categories" for Moderate areas would occur early in the planning process, before potential control measures are identified or attainment modeling is conducted. The proposal recognized the challenges associated with defining "source categories." The proposal also included potential options on how source categories could be defined, and requested comment on using the North American Industry

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statutory interpretation of RACM, that the CAA does not compel a state to consider a measure without regard to whether it would expedite attainment.

[70] The proposal described situations where some control measures could be exempted from consideration at the beginning of the analytical process. For example, control measures for a particular precursor would not need to be evaluated if the air agency submits an acceptable precursor demonstration as described in Section III of the preamble.

[71] This has been the EPA's longstanding interpretation of RACM/RACT in CAA sections 172(c)(1) and 189(a)(1)(C), which were enacted as part of the amendments to the Act in 1990. Even prior to the 1990 amendments, the EPA interpreted the statutory term RACM to encompass only those measures "necessary to assure reasonable further progress and attainment by the required date." 44 FR 20375 (Apr. 4, 1979); *see* 40 CFR 51.1(o) (1972) (defining RACT in similar terms); 42 U.S.C. 7502(b)(2) (1988) (requiring RACM in the precursor to current CAA section 172(c)(1)). In the 1990 amendments to the Act, Congress enacted a "[g]eneral savings clause" stating that "[e]ach regulation, standard, rule, notice, order and guidance promulgated or issued by [EPA] under this chapter, as in effect [before the 1990 Amendments], shall remain in effect according to its terms." 42 U.S.C. 7415. Since the passage of the 1990 amendments, the EPA's interpretation of RACM and RACT as encompassing only those measures necessary to advance attainment has been upheld in multiple U.S. Circuit Courts of Appeals. *See NRDC* v. *EPA,* 571 F.3d 1245, 1251–1253 (D.C. Cir. 2009); *Sierra Club* v. *EPA,* 314 F.3d 735, 743–744 (5th Cir. 2002); *Sierra Club* v. *EPA,* 294 F.3d 155, 162 (D.C. Cir. 2002). *But cf. Sierra Club* v. *EPA,* 793 F.3d 656 (6th Cir. 2015) (holding that an area must have subpart 1 RACM/RACT approved into its SIP prior to redesignation, regardless of whether the area is attaining the NAAQS).

[72] In addition to the statutory requirements under CAA sections 172(c)(1) and 189(a)(1)(C) for RACM and RACT, CAA section 172(c)(6) requires that a state's attainment plan for a nonattainment area "include enforceable emission limitations, and such other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emission rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for attainment of such standard in such area by the applicable attainment date specified in this part." The EPA interprets this statutory provision to require a state to identify, select and implement additional measures to those identified as RACM and RACT for the area if needed to provide for timely attainment of the area. In the EPA's proposed approach, the EPA describes criteria for identifying and selecting "additional reasonable measures" for sources of direct $PM_{2.5}$ and $PM_{2.5}$ precursors in a Moderate nonattainment area which may be necessary in order to bring the area into expeditious attainment.

[73] The term "expeditious attainment" is used throughout this proposal to describe the ability of a nonattainment area to attain "as expeditiously as practicable" based on the test described here.

Classification System (NAICS) (which provides a detailed hierarchy of numeric codes for different industries and process types) at the two, four, or six digit levels.

The proposal also presented the concept of a possible bright line ambient impact threshold for determining whether a source category should be considered *de minimis* (in the event a *de minimis* concept is adopted). Comments were requested on two options: (1) No bright line threshold; and (2) a threshold in the range of 1–3 percent of the relevant $PM_{2.5}$ NAAQS. This range was selected because it was similar to the *de minimis* source category threshold range (2.0–3.3 percent of the PM_{10} NAAQS) included in the 1994 Serious Area Addendum.

b. Final Rule

Section 172(c)(3) of the CAA requires that attainment plans for $PM_{2.5}$ nonattainment areas include a "comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants." Consistent with the proposal, the final rule maintains the policy that the state must begin the control consideration process by identifying potential control measures for all the sources included in the most recently available emissions inventory for the nonattainment area. The inventory must include emissions information for all existing major stationary sources as point sources, nonpoint sources (as defined by 40 CFR 51.50) including non-major point sources, and mobile sources of direct $PM_{2.5}$ (including filterable and condensable $PM_{2.5}$) and $PM_{2.5}$ precursors in the nonattainment area. Section IV.B of this preamble provides a detailed discussion of emission inventory requirements.

The rule requires that a state must identify all of the sources reflected in the nonattainment area's base year inventory as the initial step in developing reasonable control measures for the area, as each of these sources may play a role in the area's $PM_{2.5}$ problem. A state would need to consider all inventoried sources of direct $PM_{2.5}$ emissions (including filterable and condensable $PM_{2.5}$) and sources of all four scientific $PM_{2.5}$ precursors as it conducts its determination of reasonable control measures for an area.

Some commenters suggested that subpart 4 only provides authority to regulate precursors from major stationary sources and not from other types of sources, such as area or mobile sources. However, EPA disagrees with these commenters, given that the CAA provides an overarching requirement to attain the standard as expeditiously as practicable, $PM_{2.5}$ precursor emissions play a very significant role in fine particle concentrations nationally, non-major sources are important sources of precursor emissions, and nothing in the statutory requirements for RACM and BACM limits these requirements only to major stationary sources.

As discussed in the previous section, the final rule provides that states may develop a precursor demonstration showing that a particular $PM_{2.5}$ precursor does not contribute significantly to $PM_{2.5}$ levels that exceed the standard. If such a demonstration is approved by the EPA, then the state would not be required to adopt control measures for the precursor. Note that the state would still be obligated to evaluate and adopt control measures from a source if the source has emissions of direct $PM_{2.5}$ and/or the remaining $PM_{2.5}$ precursors that must be controlled in the plan.

The EPA received a diverse set of comments on whether to include a *de minimis* source category exemption policy. Some commenters questioned why an up-front (*i.e.*, before analysis of potential control measures) source category by source category exemption should be included in the final rule in the first place, when the traditional RACT/RACM policy approach for the NAAQS implementation has enabled states not to adopt otherwise reasonable control measures if after analyzing potential control measures it is determined that such measures are not needed for expeditious attainment. These commenters also suggested that a *de minimis* source category approach would undermine any RACM/RACT analysis to evaluate whether a collection of measures could advance the attainment date by a year, because a *de minimis* exemption policy would potentially allow for an area to exempt many categories which together could have a substantial ambient impact. Other commenters noted that providing a source category exemption in one nonattainment area would give those companies a competitive advantage over the same types of sources in other areas.

A number of commenters supported the *de minimis* source category concept because they believed it could result in a reduced burden in the control measure evaluation stage and help avoid regulating sources with limited impact on $PM_{2.5}$ levels. However, a number of commenters also expressed concern about the analytical resources that might be needed to conduct air quality modeling for a *de minimis* source category analysis. To address this analytical concern, some commenters suggested that the EPA include an emissions-based threshold (*e.g.*, tons per day) rather than an air quality based threshold, and allow for its use only if controls on the source are not needed for expeditious attainment. However, the commenters did not address the fact that the air quality impact of a specific tons per day rate could vary widely from one pollutant to another within a particular nonattainment area. Other commenters noted that the NAICS system does not provide categories for nonpoint sources, and that this issue would need to be addressed if the NAICS approach were to be included in the final rule. Other commenters suggested that the rule not have a *de minimis* threshold at all but include the ability for the state to propose *de minimis* source categories to the EPA on a case-by-case basis.

After taking the range of comments on the *de minimis* source category concept into consideration, the EPA has decided to not finalize a *de minimis* source category approach for Moderate areas. The EPA is persuaded by commenters who argued it is not necessary, and believes that without this concept, the final rule will nevertheless provide sufficient flexibility in the Moderate area control measure analysis and attainment demonstration process due to the availability of precursor demonstrations, considerations of case-specific factors in determining technical and economic feasibility, and the longstanding ability for the state not to adopt certain otherwise reasonable measures if they are not needed for expeditious attainment. The EPA also finds that from a technical perspective, it would be very challenging to implement a *de minimis* source category process in a consistent manner nationally without clear guidelines describing how narrowly or how broadly a *de minimis* exemption could apply, or how the technical analysis would need to be performed. The EPA agrees with commenters that NAICS codes do not provide an appropriately comprehensive approach for defining source categories for this purpose. We note that a *de minimis* source category exemption process has been available in PM_{10} NAAQS implementation guidance (the Addendum) since 1994, and remains available. In many PM_{10} areas, it is relatively straightforward to identify the predominant source categories contributing to the NAAQS violations (such as direct PM emissions from dust or wood smoke), and therefore to be able to identify what categories might be considered *de* *minimis*. However, implementation of the $PM_{2.5}$ NAAQS presents more complex challenges. Precursors and their contribution to secondarily formed PM play a much greater role in $PM_{2.5}$ nonattainment areas than in PM_{10} nonattainment areas. In addition, the relative impact of each precursor to local $PM_{2.5}$ concentrations varies from area to area. For these reasons, a *de minimis* source category concept for $PM_{2.5}$ is not included in this final rule.

c. Comments and Responses

Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

3. Step 2: Identify Existing and Potential Control Measures

a. General Guidance

i. Summary of Proposal

The proposal preamble described general guidance for identifying existing and potential control measures.

ii. Final Rule

The guidance remains largely unchanged from the proposal. The state's compilation of existing and potential control measures[74] should be sufficiently broad to provide a basis for identifying all technologically and economically feasible controls that may be RACM or RACT for sources of direct $PM_{2.5}$ (including filterable and condensable $PM_{2.5}$) and $PM_{2.5}$ precursor emissions in the nonattainment area at issue. Because RACM applies to area and mobile sources as well as stationary sources, states should identify and consider control measures for all types of sources.[75]

It is important to note that the emission inventory provisions of this rule require states with sources of direct $PM_{2.5}$ to include emissions data for both filterable $PM_{2.5}$ and condensable $PM_{2.5}$ in the base year inventory for the nonattainment area. For some types of sources, condensable emissions can be much larger than filterable emissions, in some cases by ten times or more. Because the availability of condensable $PM_{2.5}$ emissions data has been limited to date but more data will become available through nonattainment planning efforts, the EPA recommends that states pay particular attention to identifying potential control measures for source categories with substantial condensable emissions. If measures are found to be technically and economically feasible for reducing condensable $PM_{2.5}$ emissions as well as filterable $PM_{2.5}$ emissions from a source, the state will need to adopt a new emissions limit for the source that accounts for both the filterable and condensable portions, and includes requirements for ensuring compliance using source test methods updated in 2011.[76]

The control measure evaluation process described in this section generally allows states to apply reasoned judgment as they identify potential control measures for sources of direct $PM_{2.5}$ and $PM_{2.5}$ precursors in their respective nonattainment areas. In section 51.1009(a)(3)(iii) of the final rule, the state is required to include a complete and reasoned explanation to support its selection and rejection of control measures as part of the attainment plan submission for any Moderate nonattainment area.

Existing control measures. As a starting point when identifying candidate control measures, a state should include an initial list of control measures that are being implemented or will be implemented due to promulgated and/or adopted (*i.e.*, "on the books") regulations for sources of direct $PM_{2.5}$ and $PM_{2.5}$ precursors in its Moderate $PM_{2.5}$ nonattainment area. The EPA expects that the state will incorporate anticipated emissions reductions from these "existing" control measures (such as expected SO_2 reductions from the MATS; reductions of NO_X and direct $PM_{2.5}$ from engine and fuel standards to reduce emissions from on-road and nonroad mobile sources) into its attainment demonstration modeling for the nonattainment area, and therefore the EPA believes it is appropriate for the state to clearly indicate the existence of such measures in the attainment plan for the area.

The EPA recognizes that for some sources located in a Moderate $PM_{2.5}$ nonattainment area, a state may have previously conducted control technology analyses to address emissions for previous RACM/RACT analyses or for other statutory purposes. Some of these determinations may have been done relatively recently, while other determinations may be several years old. A state may not simply rely on a previous RACM or RACT determination or other control technology analysis for a particular source or source category, regardless of how recently it was performed, when developing the attainment plan for a $PM_{2.5}$ NAAQS. Past experience has shown that due to ongoing innovation, cost-effective control technologies and process alternatives for many sectors continue to be developed, and new reasonable opportunities to reduce emissions in the future are expected to be available for existing sources, particularly those with technology determinations made several years ago. For this reason, the state must determine whether the existing controls or emissions reduction approach at the source can be updated or improved with reasonably available controls or strategies to achieve increased levels of emission reduction. In cases where a stationary source has installed new state-of-the-art emissions controls fairly recently (*e.g.*, within the last 3 years), the state technically would still need to provide a RACT analysis for the source, but in such cases it may be appropriate to find that existing controls satisfy the RACT requirement. Based on this policy, the state's updated RACM and RACT analyses will represent the most thorough, up-to-date review of control measures for its $PM_{2.5}$ nonattainment area. The collection of existing control measures, any updated RACT/RACM determinations, and potential new control measures can then be considered together by the state as part of a comprehensive analysis to ensure the area will attain expeditiously. The EPA notes, however, that the more recently this analysis has been done, the less effort is expected to be needed to verify that it is up to date.

Potential control measures. In addition to identifying and reviewing existing control measures for sources in a Moderate $PM_{2.5}$ nonattainment area, a state must develop a comprehensive list of potential new control measures. This process should involve close coordination between the state, source owners, municipalities, and other interested stakeholders. The potential measures should also have a strong technical basis. Analysis of emission inventory data summaries, fine particle speciation monitoring data and source apportionment air quality modeling data can help identify key sectors contributing to the $PM_{2.5}$ problem in an area. Other analyses to characterize the seasonal variation of $PM_{2.5}$

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[74] Note that the term "control measures" as used in this preamble broadly represents a range of enforceable approaches for reducing emissions. These enforceable approaches include, but are not limited to, installation of control technology, process changes, a change in fuel use, limitations on use or operation of a particular pollutant-emitting device, equipment replacement, dust minimization practices, and road paving.

[75] Additional guidance on evaluating potential control measures is provided in the previous Section III.D.1 of this preamble, Background.

[76] *See* 75 FR 80118 (December 21, 2010), revisions to test methods for measuring condensable PM emissions from stationary sources (Method 202).

concentrations and associated meteorology may help inform the state in identifying contributing sources and potential control measures.

Information about potential control measures and control technologies is available from a number of sources. One important source of information is the combined regulatory experience of other states. A compilation of existing control regulations that are on the books in other states can be a useful starting point for identifying potential control measures. Another source of information is the EPA's Office of Air Quality Planning and Standards (OAQPS) "Menu of Control Measures" document, available online at *http://www3.epa.gov/ttn/naaqs/pdfs/MenuOfControlMeasures.pdf*. This document was developed to provide information useful in the development of local emissions reduction and the NAAQS SIP scenarios, and identifying and evaluating potential control measures. It provides a broad, though not comprehensive, listing of potential emissions reduction measures for direct $PM_{2.5}$ and precursors of ozone and $PM_{2.5}$ from stationary, area and mobile sources. More complete information on mobile source control measures can be found on the EPA's Office of Transportation and Air Quality Web site at *http://www.epa.gov/otaq*.

The RACT/BACT/LAER Clearinghouse (RBLC) provides a central database of air pollution technology information (including past RACT, BACT and LAER decisions contained in NSR permits) to promote the sharing of information among permitting agencies and to aid in future case-by-case control measure determinations. The RBLC permit database contains over 5,000 determinations that can help a state identify appropriate technologies to mitigate most air pollutant emission streams. The RBLC includes data submitted by several U.S. territories and all 50 states on over 200 different air pollutants and 1,000 industrial processes, and can be searched for control approaches that address specific pollutants. The RBLC can be found at: *http://cfpub.epa.gov/rblc*.

Additionally, the EPA maintains a Web site with links to other online sources of information on control measures for states to consider.[77] Again, the EPA recognizes that control technology guidance for certain source categories has not been updated for many years, and, for this reason, the agency expects states to identify and consider new and updated information in their RACM and RACT determinations as it becomes available.

iii. Comments and Responses

Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

b. Managing Emissions From Wildfire and Wildland Prescribed Fire.

i. Proposed Rule

The EPA proposed to recommend as guidance but not as a requirement of the final rule that, if wildfire impacts are significant, contributing to exceedances of the standard, then states should consider RACM for wildfires (which RACM could include a required program of prescribed fires). The EPA also proposed to recommend that states should consider RACM for managing emissions from prescribed fires (including those prescribed fires conducted to reduce future wildfire emissions). The proposal noted that information is available from the DOI and the USDA Forest Service on smoke management programs and basic smoke management practices (BSMP). The EPA requested comment on the concept of, and practical considerations associated with RACM for wildfire and RACM for prescribed fire, including such issues as how such measures can be characterized in the emissions inventory and attainment demonstration and made federally enforceable for adoption in a SIP.

ii. Final Rule

Wildfire can make a large contribution to air pollution (including $PM_{2.5}$), and wildfire events can threaten public safety. These effects can be mitigated through management of wildland vegetation, including through prescribed fire. Such mitigation can help manage the contribution of fires to $PM_{2.5}$ levels in nonattainment areas. Prescribed fire (and some wildfires) can mimic the natural processes necessary to maintain fire dependent ecosystems, minimizing catastrophic wildfires and the risks they pose to safety, property and air quality.

Upon consideration of public comments and further consultation with other federal agencies, the EPA recommends, as guidance for states as they implement the final rule, that states follow a different approach to addressing RACM for wildland fire than the approach that the EPA proposed to recommend. Before explaining this recommendation further, the EPA wishes to clarify that the recommendation is focused on wildland fire management. There are other uses of prescribed fire and other types of burning that occur in nonattainment areas, or that affect downwind nonattainment areas, such as burning of land clearing debris, agricultural burning, and burning of logging slash on land where the primary purpose of the logging is for commercial timber sale.[78] The challenges with applying the traditional nonattainment planning framework that are raised in this discussion are particular to wildland fire, and the EPA believes that addressing these other uses of prescribed fire does not present nearly the same level of challenge, and thereby can still be accommodated within the nonattainment planning framework. For example, where these other types of burning currently contribute to $PM_{2.5}$ levels in a nonattainment area, states may, with an adequate technical demonstration, be able to take credit for reductions resulting from improvement in smoke management techniques for these types of prescribed fire where the improvement results in a demonstrated reduction in impacts in the nonattainment area. The remainder of this discussion is not meant to address these categories, and is instead focused on prescribed fire on wildlands.

The EPA also wants to clarify that it is not the intention to in any way discourage federal, state, local or tribal agencies or private land owners from taking situation-appropriate steps to minimize impacts from prescribed fire emissions on wildland. The EPA encourages all land owners and managers to apply appropriate basic smoke management practices to reduce emissions from prescribed fires, especially where a state has determined that prescribed fires are a significant source affecting air quality. The EPA understands that the federal land managers (FLMs) apply these measures routinely and will be available to consult with other agencies and private parties interested in doing the same.

However, for several reasons, the EPA does not believe it would be effective policy or technically appropriate to recommend that control measures for wildland fire be adopted into the SIP as enforceable measures and credited for emissions reductions (of $PM_{2.5}$ and precursors) that would help the area attain the standard.[79] Instead, EPA recommends that $PM_{2.5}$ nonattainment plans (and in particular the attainment demonstrations) not expressly account for expected air quality changes over the planning period resulting from changes in the use of wildland prescribed fire to reduce future wildfires, or air quality changes over the planning period resulting from changes in wildland fire emissions due to a program of prescribed fire or due to any other cause including climate change. In most cases, state attainment demonstration modeling should assume that wildland prescribed fire and wildfire emissions in the attainment year will be equal to, and have the same temporal and geographic pattern as, those assumed in the baseline inventory year.

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[77] Links are provided to a number of national, state and local air quality agency sites from the EPA's $PM_{2.5}$ Web site: *http://www3.epa.gov/pm/measures.html*.

[78] The EPA notes that some wildland logging operations are conducted for the same purposes as prescribed fire (*e.g.*, reducing fuel load, ecosystem benefits, etc.). The fact that some of the removed trees may be sold as timber does not make commercial timber sale the primary purpose of such operations.

The EPA acknowledges that some temporal and spatial patterns of fire emissions must still be assumed in the attainment demonstration in order to ensure that the required air quality modeling results in a realistic physical and chemical environment and a correspondingly realistic model response against which to analyze the changes from categories where express accounting of changes is still being done. This rule is not intended to constrain the options for states regarding the appropriate assumptions to make for fire emissions. Rather, it simply recommends that once this base level is established, $PM_{2.5}$ plans should not attempt to expressly project changes over the planning period in emissions from wildfires or prescribed fires on wildland within the nonattainment area, or in upwind areas included in the modeling domain, that are due to variability in wildfire occurrence or changes in the use of prescribed fire or other wildland fire management practices. Moreover, the EPA anticipates that changes in spatial and temporal patterns of wildfire will likewise be too uncertain for them to be allowed to have the effect of reducing or increasing the control requirement on conventional anthropogenic sources. The EPA therefore recommends that baseline wildland fire emissions should generally be held constant over the planning period, regardless of whether wildland fire management practices by land managers are expected, and possibly encouraged, to change.

States still have flexibility in determining how best to represent baseline wildland fire emissions. As noted earlier, base year emission inventories for the nonattainment areas should represent the conditions leading to nonattainment and be consistent with inventories used for modeling. For fires, the EPA additionally encourages states to use a representative mix of prescribed fire and wildfire in their inventories. In the past, some plans under previous $PM_{2.5}$ NAAQS have estimated the actual fire emissions and temporal and spatial patterns from a given year and used this estimate as the assumed future baseline for planning, while others have used average emissions over multiple years. Other approaches may be appropriate as well. Moreover, regardless of the approach used, the EPA still encourages states to submit actual wildfire and prescribed fire activity data that are critical to developing emissions estimates to the NEI as suggested in the AERR.

A consequence of the recommendation of not expressly accounting for changes in wildland fires in attainment demonstrations is that measures to reduce emissions from wildland fires, such as prescribed fire for wildland wildfire prevention and mitigation purposes or smoke management programs and BSMP for prescribed fires in wildland, need not be included as RACM for the respective fire types. This is because the changes in emissions due to such measures would not be accounted for in determining what is necessary for attainment and/or what would advance the attainment date, which is how the EPA is recommending that RACM be determined. So, for example, in an area that can attain in 6 years with measures that do not address wildland fire, the EPA does not recommend that states attempt to quantify whether increased prescribed fire could advance the attainment date by 1 year, due to aforementioned difficulties associated with such quantification.

To be clear, nothing about this policy regarding RACM is intended to suggest that fires should be ignited in wildland (or elsewhere) without regard to the air quality or public health consequences. As noted earlier, the EPA believes these consequences are important to address, and intends to engage in dialogue with the FLMs, air agencies, tribes, state and private land owners and other stakeholders at appropriate times, such as during the process for the development of land management plans, about how land managers determine when and where prescribed fire is appropriate for particular wildlands and how to identify and implement appropriate mitigation measures. The policy simply makes clear the EPA's view regarding its recommendation for RACM for wildland fires.

The EPA notes that this recommendation regarding RACM differs somewhat from the recommendation that was offered in the preamble as guidance to states as they implement the EPA's recent SIP Requirements Rule for the 1997 and 2008 ozone NAAQS. The reasons for the strategy outlined earlier apply equally well to attainment demonstrations for the ozone NAAQS, and so EPA hereby makes the same recommendation for implementation of these ozone NAAQS as well. This recommendation, offered here in the same manner as the prior recommendation, supersedes the prior recommendation on RACM for wildfire in the preamble to the final SIP Requirements Rule for the 1997 and 2008 ozone NAAQS. The EPA will convey this revised recommendation to the air agencies that are working to prepare these ozone SIPs. The EPA also anticipates making this recommendation as part of our planned rulemaking on implementation of the 2015 ozone NAAQS. Note that this discussion pertains only to the RACM policy, and that other aspects of the fire discussions in the ozone SIP Requirements Rule remain applicable.

Finally, the EPA notes that, because a significant element of the rationale for this policy is the uncertainty in the timing of wildfires, we may reconsider this recommendation in the future, if adequate tools emerge that allow for predicting fire emissions with sufficient specificity. However, even if such tools emerge, due to inherent uncertainties it may be impossible to satisfactorily incorporate the use of such information into an attainment demonstration framework.

iii. Comments and Responses

The EPA received many comments expressing agreement with EPA's recognition of the importance of wildland prescribed fire, and welcoming continued dialogue among states, the EPA, and other federal agencies on how best to ensure that land managers have adequate management tools available, including prescribed fire and some wildfire, but also to ensure that use of these tools does not result in unhealthy air. The EPA intends to engage in such dialogue.

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[79] These reasons include concerns raised by commenters about the difficulties associated with requiring or even encouraging states to incorporate wildland fire emissions into existing nonattainment planning procedures and practices under the CAA; high year-to-year variability and unpredictability with emissions from wildland fires; uncertainty in the amount of credit to give for reduced wildfire within the planning period and in the amount of benefit that exists after accounting for increases in prescribed fires within the planning period; and finally, the fact that air quality data actually influenced by fire events may ultimately be excluded under the provisions of the Exceptional Events Rule.

Some commenters also took positions on how specifically to define RACM for wildfires, ranging from required smoke management plans to simply stating that fires themselves are RACM with no further measures required. In light of the fact that EPA did not propose specific guidance on defining RACM for wildfires and typically does not define RACM for specific categories, and the fact that EPA is not recommending that states include RACM as proposed, we are not providing further guidance in response to those comments. Similarly, regarding baseline fire emissions, some commenters provided detailed suggestions regarding approaches to calculating baselines based not on actual fires (which may include periods when fires were suppressed) but on science-based fire regimes, fire return intervals and ecosystem types, including characteristics of wildland vegetation. The EPA notes that this guidance is not establishing or recommending any particular approach to calculating baseline fire emissions.

c. RACT for EGUs

i. Summary of Proposal

Through guidance in the preamble to the 2007 $PM_{2.5}$ Implementation Rule, the EPA established a rebuttable presumption that compliance with the CAIR would satisfy RACM and RACT requirements for SO_2 and NO_X emissions from EGUs in states participating in the CAIR cap-and-trade program for such emissions.[80] The EPA indicated that states could presume that EGUs located within a given nonattainment area were meeting the RACM and RACT requirements, based solely upon a regional program that imposed controls for SO_2 and NO_X emissions from sources both within and outside designated nonattainment areas.

In June 2007, the EPA received a petition for reconsideration questioning the legality of this presumption, which the D.C. Circuit later found to be unlawful in the context of a similar presumption in the Phase 2 Ozone (NAAQS) Implementation Rule.[81] The agency granted the petition for reconsideration in 2011 and proposed to withdraw from the 2007 $PM_{2.5}$ Implementation Rule any presumption that compliance with the CAIR automatically satisfies RACM and RACT requirements for SO_2 and NO_X emissions from EGUs located in nonattainment areas for the 1997 $PM_{2.5}$ NAAQS.[82] [83] In that proposal, the EPA explained that given the explicit wording of CAA section 172(c)(1) that sources "in the area" (*i.e.*, in the nonattainment area) must at a minimum adopt RACT controls for that area, the agency believes that it is no longer appropriate to presume that this requirement is satisfied merely based upon the participation of a source in a regional cap-and-trade program. Indeed, implicit in a regional cap-and-trade program is that some sources, including those located within nonattainment areas, may elect to buy allowances in lieu of controlling emissions in order to meet the regional emissions reductions requirements.

Accordingly, in the proposal the EPA stated that it did not intend to include any rebuttable presumption that the CAIR or any other regional control strategy constitutes RACM or RACT for EGUs or any other source category. Instead, the EPA stated that it is clarifying that in order to meet the RACM and RACT requirements for the $PM_{2.5}$ NAAQS, states should evaluate EGU sources for RACM and RACT level controls just like any other source category, and not merely presume for EGUs located in a nonattainment area that compliance with a cap-and-trade program, including the CAIR or any other program, would satisfy their obligation to implement RACM and RACT. As required by the CAA, states are required to analyze what constitutes RACM and RACT for EGUs in each nonattainment area.

ii. Final Rule

The final rule maintains the proposed policy approach as described earlier. As required by the CAA, states are required to analyze what constitutes RACM and RACT for EGUs in each nonattainment area, just as they are required to do for all other types of sources.

iii. Comments and Responses

Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

4. Step 3: Determine Whether an Available Control Measure or Technology Is Technologically Feasible

a. Summary of Proposal

The proposal cited longstanding guidance from the General Preamble regarding factors to consider when determining the technological feasibility of a potential control measure or control technology, and it requested comment on the factors. These factors included a source's processes and operating procedures, raw materials, physical plant layout, and potential environmental impacts such as increased water pollution, waste disposal, and energy requirements. One sentence in the proposal stated: "With respect to determining whether a given control measure might not be technologically feasible for an area or mobile source, the EPA also proposes to retain its longstanding practice that a state may consider relevant factors in conducting its analysis, such as the social acceptability of the measure . . ."[84]

b. Final Rule

Several comments addressed the EPA's inclusion of the social acceptability factor in the proposal. In reviewing this issue, the EPA determined that this factor actually has not been identified as a factor in the EPA's longstanding guidance, and thus was mischaracterized in the proposal. Nevertheless, some commenters supported inclusion of the factor because no other factor is presented to help limit or eliminate a potential measure with strong public opposition. Other commenters that opposed use of such a factor suggested that including it in the final rule could allow a state to reject almost any control measures that is otherwise found to be technically and economically feasible.

When the EPA issued a proposed $PM_{2.5}$ NAAQS implementation rule in 2005, it requested comment on the same social acceptability factor, and ultimately did not include social acceptability as a factor for determining RACM in the final 2007 $PM_{2.5}$ implementation rule. In the 2007 final rule, however, the EPA stated:

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[80] *See* the **Federal Register** published on April 25, 2007 (72 FR 20586, 20623, 20624 and 20625).

[81] *See* "Petition for Reconsideration," filed by Paul Cort, Earthjustice, on behalf of the American Lung Association, Medical Advocates for Healthy Air, Natural Resources Defense Council, and the Sierra Club (June 25, 2007). A copy of the petition is in the docket for this action. The EPA's decision to grant the petition for reconsideration on the issue of the CAIR being presumptively equal to RACT for EGUs was in part based on a D.C. Circuit decision related to a similar issue. Specifically, the Court decided that the provisions in the Phase 2 Ozone Implementation Rule indicating that a state need not perform (or submit) a NO_X RACM/RACT analysis for EGU sources subject to a cap-and-trade program that meets the requirements of the NO_X SIP Call are inconsistent with the statutory requirements of CAA section 172(c)(1). The Court concluded that the phrase "in the area" means that reductions must occur from sources within the area and "reductions from outside the nonattainment area do not satisfy the requirement." *See NRDC* v. *EPA*, 571 F.3d 1245 (D.C. Cir. 2009).

[82] Letter dated April 25, 2011, from former Administrator Lisa Jackson to Paul Cort, Earthjustice. A copy of this letter is located in the docket for this action.

[83] 79 FR 32892 (June 9, 2013).

[84] *See* the proposed $PM_{2.5}$ SIP requirements rule (80 FR 15340, 15373)

"Therefore, given the concerns raised by commenters that establishment of 'social acceptability' as a factor in the RACM analysis is without basis in the CAA and might result in inappropriate skewing of control strategies, we have removed this term from the final rule. We reiterate, however, that capability of effective implementation and enforcement are relevant considerations in the RACM analysis, even though public 'unpopularity' is not. Moreover, in assessing the efficacy of measures and the credit they should be given in the context of attainment demonstrations or RFP calculations, EPA believes that such considerations are important." For the same reason it was not included in the previous implementation rule, the EPA has decided to not include the social acceptability factor in this final rule as well. *See* 40 CFR 51.1009(a)(3)(i).

The following guidance is similar to what was presented in the proposal but has been updated to exclude the social acceptability factor:

> Once a state has identified existing and potential control measures and technologies for sources of direct $PM_{2.5}$ and $PM_{2.5}$ precursors in the nonattainment area(s), it must evaluate these controls to determine if any of those controls would be technologically infeasible in the particular nonattainment area.

With respect to the technological feasibility of control technologies for stationary sources, the EPA has a longstanding approach to evaluating facts relevant to this criterion under subpart 4.[85] The EPA interprets the term technological feasibility to include consideration of factors such as a source's processes and operating procedures, raw materials, physical plant layout, and potential environmental impacts such as increased water pollution, waste disposal and energy requirements. For example, the EPA recognizes that the process, operating procedures and raw materials used by a source can affect the feasibility of implementing process changes that reduce emissions and can also affect the selection of add-on emissions control equipment. The feasibility of modifying processes or applying control equipment also can be influenced by the physical layout of the particular plant, if the physical space available in which to implement such changes limits the choices. A state may consider such factors in determining whether a control measure is or is not technologically feasible to implement.[86]

In addition, with respect to determining whether a given control measure might not be technologically feasible for an area or mobile source, the EPA also retains its longstanding practice that a state may consider relevant factors in conducting its analysis, such as the condition and extent of needed infrastructure, population size, or workforce type and habits, which may prohibit certain potential control measures from being implementable.

c. Comments and Responses

Comment: Some commenters stated that the EPA should make clearer in its rule and guidance that some categories of sources, particularly those such as animal and crop production, do not lend themselves to national determinations of best control practices; instead, these types of sources should be evaluated on nonattainment area specific conditions in determining the appropriate level of control measures.

Response: The EPA agrees that nonattainment area-specific conditions are important factors when considering emission reduction options. States need to consider the feasibility of all identified options that have been demonstrated to reduce $PM_{2.5}$ and $PM_{2.5}$ precursors to determine whether such measures are appropriate for use in a particular $PM_{2.5}$ nonattainment area.

The EPA believes the determination of best control practices for any operation, particularly for animal production or crop production operations, should be a case-specific process. The process should start with the identification of $PM_{2.5}$ and $PM_{2.5}$ precursor emissions from the operation. Then it should consider which of the measures for reducing $PM_{2.5}$ and $PM_{2.5}$ precursors in a particular $PM_{2.5}$ nonattainment area are technically and economically feasible for a particular operation. The EPA recognizes that there are a number of factors specific to each operation that could determine whether a potential emission reduction measure is technically and economically feasible for implementation.

Although the EPA is not making any national determinations of best control practices for animal production and crop production operations, we do note that there are many relevant references on potential emissions reduction options, including the Agricultural Air Quality Conservation Measures Reference Guide for Cropping Systems and Land Management.[87] The EPA and USDA jointly developed this document to identify measures that have been demonstrated to reduce emissions and describe factors related to the applicability of each measure. A companion document is under development by the EPA and USDA that will identify potential emission reduction approaches for livestock operations. Additionally, USDA's Natural Resources Conservation Service (NRCS) provides a list of approved practices in managing air emissions of concern for particulate matter, ozone, greenhouse gas, and odor-related issues.[88] A number of regulatory and non-regulatory programs are already being implemented (in nonattainment and attainment areas alike) to reduce emissions of $PM_{2.5}$ and $PM_{2.5}$ precursors from agricultural operations. Finally, a large body of information is available on topics such as feed management, livestock housing, conservation tillage, road use and other topics from federal agencies, states, industry groups, academic institutions, and international organizations.

5. Step 4: Determine Whether an Available Control Measure or Technology Is Economically Feasible

a. Summary of Proposal

The proposal described that in the 1992 General Preamble, EPA's longstanding interpretation of the term "economic feasibility" in the context of evaluating potential RACM and RACT has included a presumption that it is reasonable for similar sources to bear similar costs of emissions reductions, even if they are in different nonattainment areas or different states. The proposal indicated that this presumption was not included in the 2007 implementation rule for the $PM_{2.5}$ NAAQS that the EPA had received a petition for reconsideration with respect to this issue, and that EPA had granted this petition in 2011.[89] [90] The March

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[85] *See* the **Federal Register** published on April 16, 1992 (57 FR 13498, 13540 and 13541).

[86] Addendum to the General Preamble, 59 FR 41998 (August 16, 1994), at page 42013. Guidance is provided in the context of Serious area BACM determination, but the EPA is applying it here for Moderate area RACM determinations.

[87] *See* the EPA Web site at *https://www3.epa.gov/airquality/agriculture/*.

[88] *See* the USDA NRCS Air Quality Technical Resources at *http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/air/quality/*.

[89] "Petition for Reconsideration," filed by Paul Cort, Earthjustice, on behalf of the American Lung Association, Medical Advocates for Healthy Air, Natural Resources Defense Council, and the Sierra Club (June 25, 2007). A copy of the petition is in the docket for this action.

[90] Letter dated April 25, 2011, from former Administrator Lisa Jackson to Paul Cort, Earthjustice. A copy of this letter is located in the docket for this action.

2015 proposed $PM_{2.5}$ SIP requirements rule indicated the EPA's intention to not adopt the economic feasibility factors as described in the 2007 rule, but to return to the original interpretation from the 1992 General Preamble, including the presumption that it is reasonable for similar sources to bear similar costs of emissions reductions.

The proposal also characterized past guidance from the 1992 General Preamble as stating that if a state contends that a source-specific control level should not be established because the source(s) cannot afford the control measure that is demonstrated to be economically feasible for other sources in its source category, then the state must support the claim with information regarding the impact of imposing the identified control measure or technology on the several financial indicators. The proposal also recommended that cost effectiveness should generally be evaluated by assessing the cost per ton of emissions reduced associated with a control measure, but the proposal also requested comment on an alternative metric to assess cost effectiveness in terms of the cost per unit of air quality improvement (*i.e.,* "cost per microgram").

b. Final Rule

Based on a consideration of the comments received, the EPA has determined that economic feasibility considerations should generally align with the interpretation in the 1992 General Preamble. Note that the proposal indicated that if it is claimed that a control approach is not economically feasible for a specific source, the state needs to provide information related to several financial indicators to support the claim. We note that the original policy in the 1992 General Preamble suggests that if a source desires to make such a claim, it should provide such information to the state for its consideration. This final rule characterizes the policy in a similar manner, where the source would have the option of providing this financial information to the state for its review. This approach should address the concerns of some commenters that such financial information may not be readily available to the state. Thus, the final policy for considering economic feasibility of control measures is described in the following paragraphs.

The EPA has a longstanding interpretation of the term "economic feasibility" in the context of evaluating potential RACM and RACT which involves considering the cost of reducing emissions and the difference between the cost of an emissions reduction measure at a particular source and the cost of emissions reduction measures that have been implemented at other similar sources in the same or other areas.[91] Absent other indications, the EPA presumes that it is reasonable for similar sources to bear similar costs of emissions reductions. Economic feasibility of RACM and RACT is thus largely informed by evidence that other similar sources have implemented the control technology, process change or measure in question.

For each technologically feasible control measure, a state should evaluate the economic feasibility of the measure or control, through consideration of factors such as the capital costs, operating and maintenance costs, and cost effectiveness (*i.e.,* cost per ton of pollutant reduced by that measure or technology) associated with such measure or control. A state should not reject a technologically feasible control measure or technology as being economically infeasible if such a measure or technology has been implemented at other similar sources (*i.e.,* at sources that would be included in the same source category in the emissions inventory data collection process), unless the state provides an adequate justification that clearly explains the specific circumstances of the source or sources in the nonattainment area that make such a measure or technology economically infeasible for sources in the nonattainment area. *See* 40 CFR 51.1009(a)(3).

The EPA believes that it is appropriate for states to give substantial weight to cost effectiveness in evaluating the economic feasibility of an emission reduction measure or technology. The cost effectiveness of a measure is its annualized cost ($/year) divided by the emissions reduced (tons/year) which yields a cost per amount of emission reduction ($/ton). Cost effectiveness provides a relative value for each emissions reduction option that is comparable with other options and, in the case of control technologies, other facilities. In considering what level of control is reasonable, the EPA does not recommend a specific fixed dollar per ton cost threshold for economic feasibility of controls identified as potential RACM and RACT.

If a source contends that a source-specific control-level should not be established because the source cannot afford the control measure or technology that is demonstrated to be economically feasible for other sources in its source category, the source should make its claim known to the state and support the claim with information regarding the impact of imposing the identified control measure or technology on the following financial indicators, to the extent applicable:

(1) Fixed and variable production costs ($/unit)

(2) Product supply and demand elasticity

(3) Product prices (cost absorption vs. cost pass-through)

(4) Expected costs incurred by competitors

(5) Company profits

(6) Employment costs

(7) Other costs (*e.g.,* for RACM implemented by public sector entities).[92]

c. Comments and Responses

Comment: With regard to the presumption that it is reasonable for similar sources to bear similar costs of emissions reductions, some commenters supported returning to the approach described in the General Preamble as EPA proposed, while other commenters suggested that based on its experience with industry the EPA knows that just because a technology will work at one source does not mean that it will necessarily work at a similar source due to source configuration and non-RACT reasons (*e.g.,* enforcement proceedings) for the installation of different technology at "similar" sources.

Response: The latter commenters appear concerned that the rule would require the imposition of all controls on similar sources without allowing for consideration of whether such controls are technologically and economically feasible. This is not what EPA proposed. Instead, the EPA proposed, and is now finalizing, a requirement that the state first identify potential control measures for sources in a nonattainment area. The state should then identify which control measures are economically and technologically feasible based on its review of various factors. If the state determines that certain controls are not reasonably available based on its review of these factors, it must provide a written justification to the EPA explaining its rationale. This review should at least evaluate the feasibility of all the identified controls on similar sources to determine whether implementation of such controls in the nonattainment area at issue is reasonable. The EPA recognizes that there are a number of source-specific factors that the state can take into account in making these determinations. Factors such as the physical onsite configuration of a facility may determine whether a particular control device or operation can be feasibly implemented. Likewise, a state should take into account information provided by the source on particular economic factors such as those described earlier in making a case-by-case determination of the economic feasibility of a control measure.

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[91] *See* the **Federal Register** published on April 16, 1992 (57 FR 13498, 13540 and 13541).

[92] These longstanding factors were established in the EPA guidance in 1992 and are applicable to implementation programs for all the NAAQS pollutants. *See* the appendices to the General Preamble, 57 FR 18070 (April 28, 1992).

Comment: Two commenters supported the EPA's proposal that cost-effectiveness should consider capital costs, operating costs and maintenance costs at the particular source in question.

Some commenters supported using an alternative cost effectiveness metric such as cost per microgram of air quality improvement where appropriate air quality modeling has been developed for the area and can reasonably characterize the relative importance of various precursors. Some commenters opposed the proposal's alternative cost-effectiveness metric because the approach is overly complex and the impacts are rarely uniform across an area.

Response: The EPA has decided to maintain its traditional recommendation to use a cost per ton approach for evaluating the cost effectiveness of particular control options. The EPA does not recommend the cost per microgram alternative approach because there are a number of technical and resource challenges associated with implementing it in a technically rigorous manner based on detailed air quality modeling information. The EPA believes that this policy approach would unnecessarily add complication and extra burden to the state's process for determining economic feasibility for subject sources in a nonattainment area. Moreover, the EPA believes that the flexibility described here to consider cost-effectiveness in assessing economic feasibility, when coupled with the upcoming discussion of Step 6, and with the major stationary source and comprehensive precursor demonstrations previously described will ensure that unreasonable application of measures (*e.g.,* those that are not effective in reducing $PM_{2.5}$ concentrations) will not occur.

6. Step 5: Determine the Earliest Date by Which a Control Measure or Technology Can be Implemented in Whole or in Part

a. Summary of Proposal

In this section, the proposal discussed two main issues related to the date by which control measures can be implemented. First, it proposed that when a state is determining RACM/RACT, it must consider whether a control measure can be implemented in part when full implementation of the measure within 4 years of designation is not feasible. The proposal also introduced the concept of "additional reasonable measures," meaning those measures that can only be implemented after the fourth year but prior to the Moderate area 6-year attainment date. It was proposed that a state must identify additional reasonable measures and adopt those measures as needed for expeditious attainment.

b. Final Rule

This section remains relatively unchanged from the proposal. CAA section 189(a)(1)(C) requires that the attainment plan for a Moderate $PM_{2.5}$ nonattainment area provide for the implementation of RACM and RACT no later than 4 years after designation. The agency has long interpreted the term "implemented" to mean that a control measure or technology has not only been submitted to the EPA for approval as part of a SIP but has also been built, installed and/or otherwise physically manifested, and is achieving the intended emissions reductions, and the EPA retains this definition in this rule. *See* 40 CFR 51.1000.

The EPA recognizes that a state may be able to implement a given control measure only partially within 4 years after designation. The EPA addressed this situation in the General Preamble, stating: "It is important to note that a State should consider the feasibility of implementing measures in part when full implementation would be infeasible."[93] The EPA continues to interpret the RACM/RACT definition to mean that a state should not reject an otherwise technologically and economically feasible control measure or technology as RACM or RACT even if it can be only partially implemented within the statutory 4-year timeframe following designation of the area. Instead, a state must adopt as RACM and RACT that portion of a control measure or technology that can feasibly be implemented within 4 years of the effective date of designation. *See* 40 CFR 51.1009(a)(4)(i)(A). For instance, if paving unpaved roads is a control measure that is technologically and economically feasible in a nonattainment area but a state cannot pave all candidate roads within 4 years of designation, the state must adopt as RACM a measure that requires paving of that portion of roads that the state could feasibly accomplish within 4 years if such a measure is needed for timely attainment of the $PM_{2.5}$ NAAQS in the area.

Therefore, for the purposes of meeting the RACM/RACT requirement, a state must identify those technologically and economically feasible control measures and technologies that it can implement fully or partially within 4 years of designation of its Moderate $PM_{2.5}$ nonattainment area. Depending on the severity of the $PM_{2.5}$ nonattainment problem in the area, some or all of these measures identified as implementable within 4 years may be needed in order to bring the area into attainment as expeditiously as practicable. These candidate measures may constitute RACM and RACT if the state determines, through its attainment demonstration that it needs to implement them to achieve timely attainment for the area.

In addition, a state must separately identify those technologically and economically feasible control measures that can only be implemented after the statutory window for implementing RACM and RACT, but before the attainment date. The statutory 4-year timing requirement for implementing RACM and RACT under CAA section 189(a)(1)(C) limits the control measures and technologies that can qualify as RACM and RACT for a Moderate $PM_{2.5}$ nonattainment area. However, the statutory requirement of CAA 172(c)(6) also requires states to implement "other measures" necessary to provide for timely attainment in an area. The EPA interprets this provision to include "additional reasonable measures," which are those measures and technologies that can be applied at sources in the nonattainment area that are otherwise technologically and economically feasible but can only be implemented in whole or in part later than 4 years after designation.[94]

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[93] 57 FR 13498 (April 16, 1992), at page 13541.

[94] With respect to "partial measures" under this proposed approach, the EPA would require that a state implement as RACM that portion of any control measure determined to be technologically and economically feasible and implementable within 4 years after designation of a nonattainment area. The state would then be required to implement as an additional reasonable measure that portion of the same control measure that can be implemented starting 4 years from designation

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7. Step 6: Evaluate the Collective Impact of Potential Control Measures To Determine Whether the Area Can Attain Expeditiously or Whether it is Impracticable to Attain by the Attainment Date, and Adopt the Appropriate Set of Control Measures

a. Summary of Proposal

The proposal described the control measure requirements for two situations: The case where the state can demonstrate attainment by the attainment date; and the case where the state demonstrates the area cannot practicably attain by the attainment date. If a state determines that a Moderate nonattainment area can attain the $PM_{2.5}$ NAAQS by the statutory attainment date, the state must adopt and implement any technologically and economically feasible control measures that are necessary to ensure that the area will attain the NAAQS as expeditiously as practicable. Those technologically and economically feasible measures needed for attainment that can be implemented within 4 years of the date of designation would be considered to be RACM/RACT. Those measures needed for attainment that cannot be implemented within 4 years but can be implemented no later than the attainment date would be considered to be "additional reasonable measures." The proposal stated that, consistent with longstanding policy, this means that the state may choose to not adopt certain measures if collectively they would not advance the attainment date by 1 year.[95]

For the situation where a state determines that it is impracticable to attain by the Moderate area attainment date, the proposal included two policy options for describing what control measures must be adopted and implemented. One option would have required the state to adopt all technologically and economically feasible control measures, as stated in past guidance in the General Preamble. The other option would have required adoption of technologically and economically feasible control measures with an explicit exception for those measures that collectively are determined to be "ineffective in reducing ambient $PM_{2.5}$ levels." The proposal also reviewed the proposed options for demonstrating that a precursor does not make a significant contribution to $PM_{2.5}$ levels that exceed the standard, and discussed how the final precursor policy may be an important consideration in deciding upon a control measure policy approach for Moderate areas that demonstrate they cannot practicably attain.

b. Final Rule (General)

For an area that can demonstrate that it will attain by the attainment date, the final rule maintains the same approach as described in the proposal regarding the collective evaluation of potential control measures to determine whether the area can advance the attainment date by 1 year. For an area that demonstrates that it would be impracticable to attain by the attainment date, the final rule does not include an explicit exception for those measures that collectively are determined to be "ineffective in reducing ambient $PM_{2.5}$ levels." More details are provided in sections (c) and (d) that follow.

Section 189(a)(1) of the CAA establishes a requirement that the attainment plan for a Moderate $PM_{2.5}$ nonattainment area must demonstrate either that an area can attain the relevant NAAQS by the applicable attainment date, or that it is impracticable for the area to do so. As noted previously, for Moderate $PM_{2.5}$ nonattainment areas, the "applicable attainment date" is as expeditious as practicable, but no later than the end of the sixth calendar year after designation as nonattainment. A complete discussion of the requirements for attainment demonstration modeling is presented in Section IV.E of this preamble. However, one of the key features of attainment demonstration modeling and related analysis is that they provide a means of synthesizing the effects of emissions reductions from all existing and potential new control measures identified for sources in a given nonattainment area on overall air quality in that area. States will use the results of their analyses to identify the appropriate combination of reasonable control measures for sources in their Moderate $PM_{2.5}$ nonattainment area and any other control measures needed on sources outside the nonattainment area to ensure expeditious attainment of the relevant NAAQS in the area and to meet the statutory requirements of CAA sections 189(a)(1)(B) and 172(c)(6) as explained later.[96]

Section 188 establishes the attainment dates for Moderate and Serious PM_{10} nonattainment areas, and this rule also applies such dates to Moderate and Serious $PM_{2.5}$ nonattainment areas. As described in Sections IV.D and IV.E of this preamble, in the case of a Moderate $PM_{2.5}$ nonattainment area for which a state can demonstrate attainment by the end of the sixth calendar year following designation, the state must follow a two-step process for determining the appropriate attainment date for the area. First, the state must demonstrate through air quality modeling that the area can attain the relevant NAAQS by the latest statutory attainment date and determine which control measures and technologies are needed for the area to attain by that date. Second, the state must determine whether implementing other reasonable controls (*i.e.*, those not needed for attainment by the latest possible date but that are technologically and economically feasible) can cumulatively advance the attainment date for the area by at least 1 year. In the event that a state determines that the area can attain the relevant NAAQS earlier through the application of other measures, the state must propose the earlier date as part of the attainment plan submission for the area. When the EPA takes action to approve the different elements of the attainment plan for the area, one of the elements that the agency will take action on will be the state's proposed attainment date for the area. If the EPA approves an attainment date for the area that is earlier than the latest date allowed by statute, then the applicable attainment date for the area will be the approved date. *See* 40 CFR 51.1004(a)(1)(i). If the area ultimately needs additional time to attain the relevant NAAQS, the state may request an attainment date extension for the Moderate nonattainment area under section 188 as long as certain conditions are met, as described in Section IV.J of this preamble.

c. Final Rule—Step 6 (Attainment Case): If the State Can Demonstrate Attainment in the Area by the Statutory Attainment Date for a Moderate Area, Then the State Must Implement Those Control Measures Needed for Expeditious Attainment of the NAAQS in the Area

If a state determines that a Moderate nonattainment area can attain the $PM_{2.5}$ NAAQS by the statutory attainment date, the state must adopt and

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through the sixth calendar year following designation.

[95] In the context of the PM_{10} NAAQS, the EPA has concluded that "advancement of the attainment date" should mean an advancement of at least 1 calendar year. *See* "State Implementation Plans; General Preamble for the Implementation of Title I of the CAA Amendments of 1990," 57 FR 13498 (April 16, 1992). *See also Sierra Club* v. *EPA,* 294 F.3d 155 (D.C. Cir. 2002).

[96] Note that under section 110(l) of the CAA, after a state has adopted a control measure into the SIP for an attainment demonstration, it may remove or modify a measure if the state demonstrates to the satisfaction of the EPA that such removal or modification will not interfere with any applicable requirement of the CAA, such as attainment of the $PM_{2.5}$ NAAQS or meeting RFP requirements.

implement any technologically and economically feasible control measures that are necessary to ensure that the area will attain the NAAQS as expeditiously as practicable. The EPA will consider any such measures that can be implemented within 4 years of designation of the area to fulfill the RACM and RACT requirements for the area. In addition, the EPA will consider any such measures that can only be implemented between 4 years and the sixth calendar year after designation to meet the requirements of CAA section 172(c)(6) as "additional reasonable measures" for the area and necessary to demonstrate timely attainment under CAA section 189(a)(1)(B).

For this type of situation, the state may reject any otherwise technologically or economically feasible measures that are not needed to demonstrate attainment or that will not advance the attainment date by at least 1 year. That is, for a Moderate area that can demonstrate attainment by the statutory Moderate area attainment date, the EPA defines as "reasonable" only those technologically and economically feasible measures that are necessary for expeditious attainment of the NAAQS, as the CAA does not require a state to adopt measures that are not needed for expeditious attainment in a Moderate $PM_{2.5}$ nonattainment area. Thus, a state may exclude those otherwise reasonably available measures that, if adopted and considered collectively, would not advance the attainment date for the area by at least 1 year, so long as the state can demonstrate attainment as expeditiously as practicable and no later than the statutory Moderate area attainment date. The EPA maintains that identifying a complete set of measures that qualify as RACM/RACT and additional reasonable measures but that are not necessary for attainment within 6 years is imperative to adequately demonstrate that such measures will not collectively advance the attainment date for a Moderate area by at least 1 year. The EPA will require a robust analysis and explanation by the state when such determinations are made. *See* 40 CFR 51.1009(a)(4)(i).

d. Final Rule—Step 6 (Impracticability Case): If the State Cannot Demonstrate Attainment by the Statutory Attainment Date for a Moderate Area, Then the State Must Adopt All Reasonably Available Control Measures

Section 189(a)(1)(B) of the CAA anticipates that not all Moderate nonattainment areas will be able to demonstrate attainment by the attainment date, and it incorporates the concept of an "impracticability demonstration" for such areas.[97] Commenters on this issue stated that nowhere in the statute is there an explicit exception for those measures that collectively are determined to be "ineffective in reducing ambient $PM_{2.5}$ levels." Further, they suggested that such an approach would enable the most polluted areas to exempt sources that individually are small by some arbitrary test when in other cleaner areas such sources would be required to reduce emissions because they collectively would advance attainment. Other commenters emphasized that sources located in such Moderate areas should still be subject to the regular review process for determining whether potential control measures are not technologically or economically feasible.

After considering comments on the two options described in the proposal, the EPA has decided to keep the policy in this final rule consistent with past guidance in the General Preamble. This guidance stated that "the EPA believes it is reasonable for all available control measures that are technologically and economically feasible to be adopted for areas that do not demonstrate attainment [by the applicable attainment date]."[98] The EPA believes that this interpretation is compelled by the language of CAA section 189(a)(1)(C), which separately requires a state to submit a Moderate area attainment plan and meet the RACM and RACT requirement, even if the state submits a demonstration showing that with those measures it cannot attain the NAAQS by the applicable attainment date.

Under this approach, if the state had an approved precursor demonstration (as described in Section III of this preamble) showing that a particular precursor does not have a significant contribution on $PM_{2.5}$ levels that exceed the standard, then it would not need to adopt control measures for that particular precursor. The state then would be required to identify potential control measures for sources in the area that emit direct $PM_{2.5}$ and any remaining significant precursors. Of these potential measures, the state would determine which would be technologically feasible to implement. Then the state would identify which of the technologically feasible measures are economically feasible to implement.

Subpart 4 requires that Moderate areas that cannot or do not meet the Moderate area attainment date be reclassified as Serious nonattainment areas, in which case sources in the areas are then subject to BACM and BACT requirements. In the General Preamble, the EPA indicated that "it may be reasonable, in some limited circumstances, for states to consider the compatibility of RACM and RACT with the BACM and BACT that will ultimately be implemented under the Serious area plans for those areas."[99] Furthermore, for such areas that do not meet the Moderate area attainment date, the EPA indicated that "in the case of RACM for area sources, EPA anticipates that any future implementation of BACM for these sources will be additive to, and hence compatible with, RACM. This is because BACM will generally consist of a more extensive implementation of the RACM measures . . . Since EPA anticipates that RACM and BACM for these sources will be compatible, the SIP's (*sic*) for these areas should reflect the application of available control measures to existing sources in moderate nonattainment areas as determined by the analysis described . . . for RACM."[100] Thus, the state should assess the remaining set of technologically and economically feasible measures with regard to the compatibility of implementing RACM/RACT in the near term in a way that supports addressing BACM/BACT for such sources when the area is reclassified to Serious.

The General Preamble also provided guidance for stationary source controls in this situation: "In many instances, the installation of pollution controls representing RACT may involve substantial capital expenditures. In the event that BACT is later required for those sources, this may require controls significantly incompatible with those recently installed as RACT, largely wasting those recent expenditures. Under such circumstances, the installation of controls in the first round of SIP planning would be unreasonable." Accordingly, SIPs for the Moderate areas that cannot practicably attain need not require major changes to the control systems for specific stack and process sources where a State reasonably demonstrates that such changes will be significantly incompatible with the application of BACT-level control systems. A State's demonstration should include, for example, showing what the State believes are RACT and BACT for the source, and why they are significantly incompatible.

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[97] The concept of an "impracticability demonstration" is established in CAA section 188(b), which addresses reclassifying Moderate $PM_{2.5}$ areas to Serious. Section 188(b)(1) of the CAA describes the EPA's discretionary authority to reclassify an area upon a determination that an area cannot practicably attain by the Moderate area attainment date. More relevant to this determination, however, CAA section 189(a)(1)(B) specifically provides for submission of a demonstration addressing this concept in the case of Moderate areas that cannot attain the NAAQS by the applicable attainment date.

[98] 57 FR 13498 (April 16, 1992), at page 13544.

[99] *Ibid. at* 13544.

[100] *Ibid.*

The EPA believes that in such cases, a state should consider selecting and implementing controls that may qualify as BACM or BACT in a Moderate nonattainment area as part of their RACM and RACT analysis. Early adoption of controls that would constitute BACM or BACT could be more efficient and could further the objectives of attaining the NAAQS expeditiously to protect public health and the environment.

e. Comments and Responses

Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

8. RACM and RACT and Additional Reasonable Measures Submission Requirements

a. Summary of Proposal

The proposal described a set of submission requirements for RACM/RACT and additional reasonable measures.

b. Final Rule

The requirements in the final rule remain very similar to those that were included in the proposal. To ensure that attainment plan submissions contain the necessary supporting information to enable the EPA to review and approve a state's evaluation and selection of measures that constitute RACM and RACT in a given nonattainment area, the EPA requires under the authority of section 301(a) of the CAA that a state must submit the following information as part of its submission:

(1) A list of all sources and activities in the nonattainment area that emit direct $PM_{2.5}$ or any $PM_{2.5}$ precursor (for multi-state nonattainment areas, this would include source categories, sources and activities from all states which make up the area). *See* 40 CFR 51.1008(a)(1).

(2) For each source or activity in the nonattainment area, an inventory of direct $PM_{2.5}$ emissions and emissions of all $PM_{2.5}$ precursors, and a comprehensive list of potential control measures considered by the state for the nonattainment area. *See* 40 CFR 51.1009(a)(2). If the state submitted a precursor demonstration that was approved by the EPA, the state would not be required to submit a list of sources and potential measures to control emissions of the relevant precursor from the stationary sources addressed by the demonstration (*i.e.,* all sources for a comprehensive precursor demonstration, or major sources for a major source precursor demonstration). *See* 40 CFR 51.1006(a)(1) and (2). Note that the emissions inventory would still need to include all sources of the relevant precursor. *See* 40 CFR 51.1008(a)(1).

(3) For each potential control measure considered by the state but eliminated from further consideration due to a determination by the state that the control measure or technology was not technologically feasible, a narrative explanation and quantitative or qualitative supporting documentation to justify the state's conclusion. *See* 40 CFR 51.1009(a)(3).

(4) For each technologically feasible emission control measure or technology, a determination of whether the measure is economically feasible must be included, with narrative explanation and quantitative supporting documentation to justify the state's conclusion. *See* 40 CFR 51.1009(a)(3). The following additional information relevant to economic feasibility should be included as necessary to justify the determination: (a) The control efficiency by pollutant; (b) the possible emissions reductions by pollutant; and, (c) the estimated cost per ton of pollutant reduced.

(5) For each technologically and economically feasible emission control measure or technology, the date by which the technology or measure could reasonably be implemented, in whole or in part. *See* 40 CFR 51.1009(a)(4)(i)–(ii).

Each of these elements will provide information needed by the EPA to evaluate whether the state is meeting the statutory requirements for an attainment plan, and in particular meeting the statutory requirement for states to implement RACM and RACT on sources within the nonattainment area. The EPA recognizes that the base year emissions inventory for the area that the state submits in conjunction with its attainment plan will likely contain some of the information proposed to be required under the first two items in this list. However, the EPA is finalizing a requirement for emissions inventory information specifically relevant to the RACM and RACT element of the state's attainment plan in order to ensure that the EPA or any other party can appropriately evaluate the state's RACM and RACT analysis.

c. Comments and Responses

Comment: Some commenters supported the general submission requirements because in some cases RACM/RACT demonstrations fail to provide the information necessary for the EPA to reasonably conclude that these requirements have been met and are supported by a systematic analysis.

Response: The EPA agrees with the commenters and the final rule generally tracks the proposal.

9. Criteria for Effective Regulations to Implement RACM and RACT and Additional Reasonable Measures

a. Summary of Proposal

The preamble to the proposed rule described the four main criteria for effective control measure regulations: Such regulations must be quantifiable, enforceable, replicable and accountable.

b. Final Rule

The guidance in this preamble to the final rule remains very similar to what was proposed. After a state has identified a particular control measure as RACM or RACT or additional reasonable measure for a particular nonattainment area, it must then implement that measure through a legally enforceable mechanism that will be included in the SIP (*e.g.,* a state rule that the EPA will approve as a part of the federally enforceable SIP for the state). The EPA is proposing that in order for the EPA to be able to approve any such measure as part of the SIP, the state would have to provide information to meet the following four criteria. These criteria are similar to the criteria finalized as part of the remanded 2007 $PM_{2.5}$ Implementation Rule.

First, the base year emissions from the source or group of sources to which the control measure applies and the future year projected emissions from those sources once controlled must be quantifiable so that the projected emissions reductions from the sources can be attributed to the specific measures being implemented. It is important that the emissions from the source category in question are accurately represented in the base year inventory so that emissions reductions are properly calculated. In particular, it is especially important to ensure that both the filterable and condensable components of direct $PM_{2.5}$ emissions are accurately represented in the base year.

Second, the control measures must be enforceable. This means that they must specify clear, unambiguous and measurable requirements. The measurable requirements for larger emitting facilities must include periodic source testing, monitoring or other viable means to establish whether the affected source meets the applicable emission limit. Additionally, to verify the continued performance of the control measure, specific emissions monitoring programs appropriate for the type of control measure employed and the level of emissions must be included to verify the continued performance of the control measure. The control measures and monitoring program must also have been adopted according to proper legal procedures. Note that if measures are found to be technically and economically feasible for reducing condensable $PM_{2.5}$ emissions as well as filterable $PM_{2.5}$ emissions from a source, the state will need to adopt a new emission limit for the source that accounts for both the filterable and condensable portions, and includes requirements for ensuring compliance using condensable $PM_{2.5}$ source test methods updated in 2011.[101]

In response to a comment on this criterion, the EPA clarifies that an enforceable regulation for a CAA program must be enforceable by the EPA, the state, and citizens. By taking action to approve emissions limitations and related provisions into the SIP, the EPA thereby makes those emission limitations a federally enforceable component of the SIP that the state, the EPA, and citizens can enforce thereafter in the event of a violation. SIP provisions that effectively preclude enforcement of violations by the EPA or citizens, whether through impermissible exemptions or other SIP provisions that function to bar effective enforcement, are not acceptable.

Third, the results of application of the control measures must be replicable. This means that where a rule contains procedures for interpreting, changing or determining compliance with the rule, the procedures are sufficiently specific and objective so that two independent entities applying the procedures would obtain the same result.

Fourth, the control measures must be accountable. This means, for example, that source-specific emission limits must be permanent and must reflect the assumptions used in the attainment plan for the area, including the modeling conducted in conjunction with the attainment demonstration. It also means that the attainment plan must establish requirements to track emissions changes at sources and provide for corrective action if emissions reductions are not achieved according to the plan.

c. Comments and Responses

Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

10. Determination of RACM and RACT and Additional Reasonable Measures in Multi-State Nonattainment Areas

a. Summary of Proposal

The proposal included several proposed recommendations about the development of control measures by states with multi-state nonattainment areas.

b. Final Rule

The guidance in the final preamble remains very similar to what was proposed. States in multi-state nonattainment areas will need to consult with each other on appropriate control measures for the shared nonattainment area. The agency anticipates that states could decide upon RACM and RACT and additional reasonable measures that differ from state to state in a shared nonattainment area, based upon each state's determination of the most effective strategies given the relevant mixture of sources and potential controls in the respective states' portions of a shared nonattainment area. As long as each state can adequately demonstrate that its chosen attainment strategy, including its selection and adoption of RACM and RACT and additional reasonable measures, will provide for meeting RFP requirements and for attainment of the NAAQS as expeditiously as practicable for the nonattainment area at issue, the EPA anticipates being able to approve individual state plans that may elect to control a different mix of sources or to implement different controls, under the proper circumstances. Nevertheless, in evaluating RACM and RACT and additional reasonable measures for a particular nonattainment area, states must consider potential reasonable control measures developed for other areas or other states, and particularly for other portions of an interstate nonattainment area. In addition, states in multi-state nonattainment areas must evaluate whether the reasonable measures each state may have identified as not being necessary for attainment could collectively advance the attainment date for the area by at least 1 year. The EPA may consider such measures in assessing the approvability of each state's individual attainment plan for a multistate nonattainment area.

c. Comments and Responses

Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

11. Environmental Justice Considerations in Developing the Attainment Plan Control Strategy for a Moderate $PM_{2.5}$ Nonattainment Area

a. Summary of Proposal

The proposal provided guidance about environmental justice considerations in developing the attainment plan control strategy for a Moderate area.

b. Final Rule

The guidance remains very similar to what was proposed. Current air quality data indicate that the more severe $PM_{2.5}$ nonattainment areas contain a high population of people with low socio-economic status, who are among the most at-risk for adverse health effects from exposure to $PM_{2.5}$. As part of its EJ2020 Action Agenda, the EPA is committed to making progress on improving air quality in communities with high particulate pollution. The EPA, therefore, strongly urges states to consider environmental justice concerns with respect to any control measures they have identified as potential RACM or RACT or additional reasonable measures in an area, particularly to the extent that control measures that a state may be considering are otherwise approximately equal (in terms of technological and economic feasibility) but unequal with respect to their direct or indirect impacts on overburdened populations.[102] In such cases, the EPA encourages the state to prioritize imposition of the control measures that will result in the least possible burden and greatest degree of health protection for overburdened populations in the nonattainment area. Section XI of this preamble discusses possible approaches for states to address environmental justice concerns associated with implementation of the $PM_{2.5}$ NAAQS in their SIP development process and attainment plans.

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[101] *See* 75 FR 80118 (December 21, 2010), revisions to test methods for measuring condensable PM emissions from stationary sources (Method 202).

[102] The term "overburdened populations" is defined in the EPA's "Plan EJ 2014" to describe the minority, low-income, tribal, and indigenous populations or communities in the U.S. that potentially experience disproportionate environmental harms and risks as a result of greater vulnerability to environmental hazards. This increased vulnerability may be attributable to an accumulation of both negative and lack of positive environmental, health, economic or social conditions within these populations or communities. For more information on Plan EJ 2014, *see https://www.epa.gov/environmentaljustice.*

c. Comments and Responses

Any comments received on this section are addressed in the Response to Comments document found in the docket for this action.

E. Modeling for Attainment Demonstrations

1. Demonstrations for Moderate Areas

a. Summary of Proposal

Section 189(a) of the CAA generally requires a state with a designated Moderate nonattainment area to submit an attainment plan for such area. Section 189(a)(1)(B) of the CAA requires the state to submit an attainment demonstration including air quality modeling to establish either: (i) That the area will attain the relevant NAAQS by the applicable attainment date; or (ii) that it is impracticable for the area to attain the relevant NAAQS by the applicable attainment date. For Moderate nonattainment areas, the attainment date is as expeditiously as practicable, but no later than the end of the sixth calendar year after designation as nonattainment. The EPA therefore proposed to require all Moderate nonattainment areas to submit either an attainment demonstration which includes air quality modeling which establishes that the area will attain the $PM_{2.5}$ NAAQS by the applicable attainment date, or an impracticability demonstration which documents that the area will not attain the NAAQS by the applicable attainment date. The EPA proposed that the impracticability demonstration must also include air quality modeling, but also asked for comments on an alternative option that would not require air quality modeling as part of an impracticability demonstration. The EPA also proposed to allow states to fulfill the statutory modeling requirement through either locally generated photochemical and/or dispersion modeling or, with proper justification, appropriate regional or national modeling.

An attainment demonstration is a plan that provides an explanation of how a state will attain the $PM_{2.5}$ NAAQS by the applicable attainment date in a particular nonattainment area.[103] The EPA proposed that the demonstration must contain: (i) Technical analyses such as base year and future year modeling of emissions which identifies sources and quantifies their emissions that are contributing to violations of the $PM_{2.5}$ NAAQS; and (ii) analyses of future year emissions reductions and air quality improvement resulting from existing (*i.e.*, already-adopted or ''on the books'') national, regional and local programs, and potential new local measures needed for attainment, including RACM and RACT controls for the area.

The EPA further proposed that each state with a Moderate nonattainment area must submit an attainment plan with an attainment demonstration that includes analyses supporting the state's determination of its proposed attainment date. In all cases, the state must show that the area will attain the NAAQS as expeditiously as practicable, but not later than the sixth calendar year after designation. In order to establish that the attainment date is as expeditious as practicable, the state must explain why the control measures adopted in the attainment plan provide for the most expeditious attainment and, in particular, must explain why any cumulative group of reasonable and available control measures that the state elected not to adopt will not collectively advance the attainment date by at least 1 year.

b. Final Rule. As required by CAA section 189(a)(1)(B), the EPA is finalizing a requirement for states with Moderate nonattainment areas to submit a demonstration to establish either: (i) That the area will attain the relevant NAAQS by the applicable attainment date; or (ii) that it is impracticable for the area to attain the relevant NAAQS by the applicable attainment date.

As proposed, attainment demonstrations must include analyses (including air quality modeling) supporting the state's determination of its proposed attainment date. In all cases, the state must show that the area will attain the NAAQS as expeditiously as practicable, but not later than the sixth calendar year after designation. The demonstration must include implementation of all measures identified as RACT/RACM plus additional reasonable measures, as necessary, for expeditious attainment. In order to establish that the attainment date is as expeditious as practicable, the state must explain why the control measures adopted in the attainment plan provide for the most expeditious attainment and, in particular, must explain why the cumulative group of reasonable and available control measures that the state elected not to adopt will not collectively advance the attainment date by at least 1 year. *See* 40 CFR 51.1009(a)(4).

The EPA is not finalizing a regulatory requirement for air quality modeling to be included as part of an impracticability demonstration. *See* 40 CFR 51.1009(a)(4). Since all nonattainment areas will have modeling requirements associated with their attainment demonstration, the EPA believes it is likely that modeling will be submitted in support of impracticability demonstrations. However, it may be possible in some cases to support an impracticability demonstration with ambient $PM_{2.5}$ data and other relevant non-modeling information. For example, the ambient data in a nonattainment area may be so far above the NAAQS, and the reasonable and available controls (*i.e.* RACM/RACT and additional reasonable measures) so limited, that it is clearly impossible (and thus also impracticable) for the area to attain by the Moderate area attainment date.[104] In order to support this type of demonstration, the state must show that, even if all reasonable controls (*i.e.* RACM or RACT and additional reasonable measures) were implemented, the state could not attain the NAAQS within the statutory timeframe for a Moderate area.

The EPA continues to assume that in most cases photochemical grid modeling will be required to demonstrate attainment with the $PM_{2.5}$ NAAQS. However, the EPA recognizes that more simplistic modeling techniques (such as dispersion, receptor, and/or box models) may suffice to demonstrate that an area will attain the NAAQS, especially in areas that are dominated by primary $PM_{2.5}$ emissions (*e.g.* residential wood smoke).

c. Comments and Responses.

Comment: Some commenters supported the EPA's proposal to require modeling to demonstrate that attainment is not practicable. The commenters stated that such an interpretation flows logically from the Act's requirement in section 189(a)(1)(B) that attainment demonstrations be supported by modeling. One commenter supported the alternative approach described in the proposal in which air quality modeling would not be required for a Moderate area impracticability demonstration.

Response: After further consideration of this issue, the EPA has determined that modeling need not be a regulatory requirement to support an impracticability demonstration. We note that CAA section 189(a)(1)(B)(i) includes the parenthetical ''including air quality modeling'' which clearly makes modeling a statutory requirement for moderate area attainment demonstrations. However, the same parenthetical statement is absent from CAA section 189(a)(1)(B)(ii), which addresses an impracticability demonstration. While we believe that most impracticability demonstrations will indeed be supported by air quality modeling, there are cases where a modeling demonstration may not be needed. In addition, the EPA believes the burden of proof for an impracticability demonstration is logically lower than for an attainment demonstration because submission of an impracticability demonstration also requires reclassification to a serious nonattainment area and the accompanying more stringent regulatory requirements (*e.g.* BACT/BACM). The area is still required to meet RACT/RACM requirements and will also be required to submit a serious area attainment demonstration, which will necessarily need to include air quality modeling.

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[103] An area is designated nonattainment for either the annual $PM_{2.5}$ NAAQS or the 24-hr $PM_{2.5}$ NAAQS or both. The attainment demonstration should show that the area is attaining the form of the NAAQS for which they have been designated nonattainment.

[104] Pursuant to CAA section 188(b)(1)(B), upon the EPA determination that attainment by the Moderate date is impracticable, the EPA shall reclassify the area as Serious within 18 months after the Moderate area SIP due date.

Comment: Some commenters agreed with the EPA that states should be afforded flexibility to fulfill the statutory modeling requirement through appropriate regional or national modeling.

Response: The EPA agrees that, where appropriate, regional and/or national scale air quality modeling could be sufficient to fulfill the statutory modeling requirement for attainment demonstration modeling. However, as with any attainment demonstration, the modeling must be shown to be appropriate for the nonattainment area, including good model performance, appropriate emissions and meteorological inputs, and consideration of emissions control strategies. It should be noted, however, that it may be difficult to fulfill other CAA requirements (such as emissions inventory, RACM, RFP, establishing motor vehicle emissions budgets for transportation conformity purposes, etc.) using regional or national modeling data. In order to fulfill those requirements, states may need more detailed data for sources in their nonattainment area compared to what is available through regional or national modeling.

Comment: Some commenters stated that, as the proposal stands, if states wish to preclude RACT/RACM for any sources in the nonattainment area, they must do modeling for the year preceding the attainment year to demonstrate early attainment; this would require modeling for 3 years, rather than 2 years.

Response: Although a RACM analysis is required, and eliminating potential control measures requires an assessment of whether the measures collectively could advance the attainment date by 1 year, EPA did not propose any specific modeling requirements for the RACM analysis. There are several components to the analysis. First, potential emissions reductions need to be assessed. Then, an assessment of whether those emissions reductions can advance attainment by at least a year needs to be completed. One way to minimize the number of future modeled years is to establish (through sensitivity modeling) a relationship between $PM_{2.5}$ and $PM_{2.5}$ precursor emissions reductions and $PM_{2.5}$ concentrations in the nonattainment area. The established relationship can be used to estimate whether a particular set of emissions reductions will be able to advance the attainment date by at least a year. Also, in some cases, the emissions reductions identified through the RACM analysis may be relatively small (as a percentage of area-wide emissions) that a modeling analysis is not needed to show that the attainment date cannot be advanced.

2. Available Modeling Guidance for Demonstrating Attainment

a. *Summary of Proposal.* The EPA proposed that attainment demonstrations should be consistent with the procedures for modeling $PM_{2.5}$ as described in the EPA's "Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, $PM_{2.5}$, and Regional Haze"[105] as well as the Guideline on Air Quality Models (40 CFR part 51, Appendix W).

The $PM_{2.5}$ attainment demonstration modeling guidance (hereafter referenced as the "modeling guidance") describes how states can apply air quality models to generate results needed to demonstrate attainment. Models are used to test whether control measures in an attainment plan to be adopted into a SIP are likely to result in attainment of the relevant standards. The attainment demonstration modeling guidance recommends a modeled attainment test for the annual and 24-hour $PM_{2.5}$ NAAQS that uses a combination of ambient $PM_{2.5}$ and $PM_{2.5}$ species data and modeled $PM_{2.5}$ concentrations to estimate future year air quality. In the recommended attainment test the state applies the test at each $PM_{2.5}$ ambient monitor location within or near a designated nonattainment area. Models are used in a relative sense to estimate the response of measured air quality to future changes in emissions. Future air quality is estimated by multiplying recent monitored $PM_{2.5}$ values by the modeled relative response (percent change) to projected future changes in emissions. If the future design value at all monitoring locations in the nonattainment area does not exceed the concentration of $PM_{2.5}$ specified in the NAAQS, the area is projected to attain the NAAQS.

b. Final Rule. In the final rule, EPA is continuing to recommend that attainment demonstrations should be consistent with the procedures for modeling $PM_{2.5}$ as described in the $PM_{2.5}$ attainment demonstration modeling guidance and Appendix W. The modeling guidance describes how states can apply air quality models to generate results needed to demonstrate attainment. These recommendations include developing a conceptual description of the problem to be addressed; developing a modeling/analysis protocol; selecting an appropriate model to support the demonstration; selecting appropriate meteorological episodes or time periods to model; choosing an appropriate area to model with appropriate horizontal/vertical resolution; generating meteorological and air quality inputs to the air quality model; generating emissions inputs to the air quality model; and evaluating performance of the air quality model. After these steps are completed, the state can apply a model to simulate effects of future year emissions and candidate control strategies.

The EPA has updated the 2007 $PM_{2.5}$ modeling guidance to include additional information related to the 2012 $PM_{2.5}$ NAAQS and associated monitoring requirements.[106] The main components of the modeling guidance and the modeled attainment test have not changed. Additional information has been added to address near-road monitoring sites and other information that was not available when the guidance was first released in 2007.

The modeling guidance continues to recommend a relative attainment test for both the annual and 24-hour $PM_{2.5}$ NAAQS. The EPA is not recommending a specific model for use in the attainment demonstration for the $PM_{2.5}$ NAAQS. At present, there is no single model that has been extensively tested and shown to be clearly superior to other available models. The current modeling guideline, 40 CFR part 51, appendix W, does not identify a preferred model for use in attainment demonstrations of the NAAQS for $PM_{2.5}$. Thus, states may choose from several alternatives.

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[105] The $PM_{2.5}$ attainment demonstration modeling guidance can be found at the following Web site: *http://www3.epa.gov/ttn/scram/guidance_sip.htm.*

[106] *See* updated guidance at *https://www3.epa.gov/ttn/scram/guidance/guide/Draft_O3–PM–RH_Modeling_Guidance-2014.pdf*: "Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, $PM_{2.5}$, and Regional Haze," December 2014.

The EPA has developed software to perform both the annual and 24-hour $PM_{2.5}$ attainment test (including interpolating PM species data where necessary). The current software is called the Software for the Modeled Attainment Test—Community Edition (SMAT–CE).[107] The software is provided as a way to make it relatively easy for states to apply the recommended modeled attainment test(s). However, states are not required to use SMAT–CE and can develop their own post-processing software as necessary.

The modeling guidance continues to describe the opportunity for states to supplement their modeling with a "weight of evidence" demonstration. States may use other information and analyses, in addition to the modeled attainment test to estimate whether future attainment of the NAAQS in an area is likely. Other analyses may include, but are not limited to, emissions trends, ambient data trends and analyses, other modeling analyses, and documentation of other non-modeled emissions control strategies, including voluntary programs.

The application of air quality models requires a substantial effort by state and local agencies. Therefore, states should work closely with their EPA regional office in executing each step of the modeling process. By doing so, it will increase the likelihood of the EPA's approval of the state demonstration submitted at the end of the modeling and overall attainment plan development process.

c. Comments and Responses.

Comment: Several commenters questioned the ability of the current most common photochemical models to accurately model how the $PM_{2.5}$ precursors impact overall $PM_{2.5}$ concentrations. They raise particular concerns about ammonia emissions and the ability of models to predict $PM_{2.5}$ formation from ammonia precursor emissions. The commenters stated that emissions inventories necessary for such modeling, as well as the tools used to measure those emissions, remain uncertain and are sometimes inaccurate; *e.g.*, emission rates are too often based on unreliable data, due to either lack of representative information or technical issues associated with test methods. Some commenters stated that these concerns are particularly salient here because the $PM_{2.5}$ SIP Requirements Proposal requires that states account for new precursors, including VOCs and ammonia.

Response: The EPA disagrees with the commenters' assertion that emissions inventory and modeling tools are insufficient to estimate $PM_{2.5}$ concentrations and the predicted change in $PM_{2.5}$ due to changes in $PM_{2.5}$ emissions and $PM_{2.5}$ precursors. While there will always be uncertainty in emissions inventories and modeling, photochemical models of $PM_{2.5}$ concentrations, including secondary formation through chemistry, have been used in the scientific and regulatory community for over 30 years. State attainment demonstration modeling has been performed by numerous states over the last 10+ years to support the 1st round of $PM_{2.5}$ SIPs that were due in 2007. In addition, the EPA has used photochemical modeling of $PM_{2.5}$ to support numerous regulatory rulemakings over the last decade.

The technical tools to perform photochemical modeling are well established and have been improved almost continuously over many years. New versions of the CMAQ and CAMx models with numerous science updates are released every 1 to 2 years. National emissions inventories that include primary $PM_{2.5}$ and all scientific precursors (SO_2, NO_X, VOC and ammonia) have existed since the NEI for 2002. The NEI is released every 3 years with methodological improvements with every release.

In addition, the commenters refer to VOC and ammonia as "new precursors," which is not accurate. VOC and ammonia have always been "scientific" $PM_{2.5}$ precursors, and as such have always been inventoried and modeled with chemistry in $PM_{2.5}$ photochemical models. The only thing "new" is that VOC and ammonia are now assumed to be presumptive $PM_{2.5}$ precursors. However, even though the previous implementation rule did not assume that VOC and ammonia were default precursors, all photochemical modeling of $PM_{2.5}$ has always included VOC and ammonia emissions and the resultant chemical formation of ammonium sulfate, ammonium nitrate, and secondary organic carbon.

The commenters were concerned that model errors in the formation of $PM_{2.5}$ from ammonia sources would impose an unreasonable regulatory burden on sources of ammonia such as animal agriculture. Even though there may be general uncertainty in ammonia inventories, it is not clear how those uncertainties would lead to an unreasonable regulatory burden on any emissions sources in particular. Every modeling application in support of an attainment demonstration must be shown to adequately represent the emissions, chemistry, and $PM_{2.5}$ concentrations in the nonattainment area. Ambient measurements of $PM_{2.5}$ and precursors are used in a model performance evaluation to demonstrate that the modeling system is appropriate to use to determine the sensitivity of $PM_{2.5}$ mass to emissions changes. In addition, all SIPs are required to undergo a public comment process where specific emissions and/or modeling concerns can be raised to the state. And then, after review of the SIP submission by EPA, all approvals or disapprovals of attainment SIPs go through a notice and comment rulemaking process. There are therefore numerous opportunities for both industry and the general public to participate in the SIP development process. States are expected to use the appropriate tools and the best information available to demonstrate how they will attain the $PM_{2.5}$ NAAQS by the attainment date. The EPA believes that the appropriate tools are available to perform the modeling needed for an attainment demonstration.

3. Demonstrating Attainment at Near-Road Monitors

a. *Summary of Proposal.* The 2012 $PM_{2.5}$ NAAQS final rule contains new requirements for operating near-road monitors in the largest metropolitan areas.[108] The first set of monitors was required to be in place by January 1, 2015. Some of the near-road monitors began operation prior to 2015. However, none of the monitors will have the requisite 3 years of monitoring data that can be used to calculate a $PM_{2.5}$ design value until 2017 at the earliest. Therefore, these data were not used for the initial designations for the 2012 $PM_{2.5}$ NAAQS (finalized in December 2014) and in most nonattainment areas, there will be less than 3 years' worth of data available when the initial attainment demonstrations for Moderate nonattainment areas are due in 2016. As a result of this timing, the EPA proposed that the initial set of Moderate area attainment demonstrations will not need to include projected design values for near-road monitors. But when 3 or more years' worth of complete ambient data are available at near-road monitors, states will need to address those monitors in their attainment demonstrations and will need to include a demonstration that those monitors will attain the NAAQS by the applicable statutory attainment date.

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[107] SMAT–CE replaced the Modeled Attainment Test Software (MATS) in January 2016. SMAT–CE performs the same functionality as MATS, but is open source, runs faster, and is more stable than its predecessor.

[108] 78 FR 3283.

b. Final Rule. For the final rule, the EPA maintains the policy of not requiring the use of ambient air quality data in a modeled $PM_{2.5}$ attainment demonstration unless there is at least one complete design value of data available (generally 3 complete years of data). This applies to both near-road and other $PM_{2.5}$ ambient monitoring data. Some states may have installed their monitors well before the January 1, 2015 deadline and may therefore have complete data before the SIP deadline. In addition, some attainment demonstrations may be submitted after the statutory deadline. Because of the varying monitor installation dates, the use of near-road monitoring data in attainment demonstrations depends on the timing of the attainment demonstration submission relative to the installation date of the monitor(s). Ambient data with sufficient completeness to calculate a design value may not be ignored in an attainment demonstration. Such data can be addressed either in the attainment demonstration analysis of ambient monitors or as part of an unmonitored area analysis (*see* the next section), as appropriate.

The revised $PM_{2.5}$ modeling guidance document includes procedures for applying a dispersion model or a combination of photochemical grid models and dispersion modeling to demonstrate attainment at monitors with large primary $PM_{2.5}$ concentration gradients. Depending on the nature of the ambient data in a particular area, it may be appropriate to treat near-road monitors as high concentration gradient locations. However, in other cases, near-road monitors may have little or no gradient compared to other nearby monitors. Therefore, the appropriate treatment of near-road monitors in attainment demonstrations should be evaluated on a case-by-case, depending on the facts and circumstances in each nonattainment area.

c. Comments and Responses.

Comment: Some commenters stated the EPA's proposal to excuse areas from having to include projected design values for near-road monitoring locations promises to undermine the likelihood of success for attainment demonstrations. The commenters stated the EPA's blanket waiver for near-road data has no rational basis and that just because such monitors were not required before January 1, 2015, does not mean that areas did not have them in place before then. The commenters stated the EPA should at least clarify that if an area has 3 years of near-road monitoring data, it should use such data in its attainment modeling. The commenters stated this would be particularly important, for example, if an area is late in preparing its demonstration.

Response: The EPA agrees there should not be a "blanket waiver" for the use of near-road monitoring data in attainment demonstrations that are due in 2016 or thereafter. The statements in the proposal referenced the fact that the near-road monitors were not required to be in place before January 1, 2015. This makes it unlikely that sufficient data from these monitors will be available to be considered in attainment demonstrations that are due in 2016. However, if complete data are available at near-road monitors during the development of the attainment demonstration, the data should be considered as appropriate (similar to any other $PM_{2.5}$ monitoring data). Since the near-road $PM_{2.5}$ monitoring network is relatively new, there may not be 3 years of complete data in time to be considered in the upcoming attainment demonstrations. In addition, the base modeling year of the attainment demonstration may predate the startup date of the near-road monitor(s). In this case, it may be possible to consider the near-road data in the attainment demonstration, but the recommended default projection methodology may not be applicable (since the time period of the near-road data may not correspond to the 5 year time period centered about the base modeling year, as recommended in the modeling guidance). Additionally, near-road $PM_{2.5}$ monitors are only required in the 27 largest metropolitan areas of the country. Some $PM_{2.5}$ nonattainment areas may not have any near-road monitoring sites. States should consult with the appropriate EPA regional office to determine the best way to treat near-road data in their attainment demonstration.

4. Demonstrating Attainment in Unmonitored Areas

a. *Summary of Proposal.* The 2007 $PM_{2.5}$ modeling guidance describes a recommended "relative" attainment test that is based on showing attainment at ambient monitoring locations. The guidance also recommends that states conduct further analyses based on modeling results to determine whether there are unmonitored areas that merit additional analysis or investigation. In order to clarify the statutory and rule requirements of a modeled attainment demonstration, the EPA proposed four options for demonstrating attainment in unmonitored areas in an attainment demonstration.

Option 1 would require the attainment demonstration modeling to demonstrate attainment at ambient monitoring locations. There would be no requirement to specifically examine attainment in unmonitored areas. Option 2 would require modeling to demonstrate attainment at ambient monitoring locations and in unmonitored areas within the nonattainment area. Enforceable emissions reductions would be required to eliminate any potential future year NAAQS violations in all locations within the nonattainment area (including unmonitored areas). Option 3 would require modeling to demonstrate attainment at ambient monitoring locations and in unmonitored areas within the nonattainment area. However, rather than requiring states to impose additional enforceable emissions reductions in the SIP to address potential violations in unmonitored areas, states would be required to use the unmonitored area analysis results to develop an assessment of the likelihood of violations in unmonitored areas. The assessment would be used to evaluate the need for additional controls and/or could be used to inform the ambient monitoring plan (the need to add additional monitors or move existing monitors). Option 4 would require modeling to demonstrate attainment at ambient monitoring locations and recommend the analysis of unmonitored areas within the nonattainment area. This differs from Option 3 in that there would be no rule requirement to perform an unmonitored area analysis. But the submission of an unmonitored area analysis would still be recommended, especially in areas with a relatively sparse $PM_{2.5}$ monitoring network or in locations where information such as modeling data, emissions inventories or non-FEM monitoring data (such as from special purpose monitors or saturation monitoring studies) may indicate potential high $PM_{2.5}$ concentrations in areas that are currently unmonitored.

b. Final Rule. The EPA is finalizing proposed Option 4. This option requires states to show attainment at all current and recent monitoring locations. States will not be required to provide an unmonitored area analysis as a mandatory element of each attainment demonstration. However, an unmonitored area analysis can provide useful information about $PM_{2.5}$

concentrations and gradients in the nonattainment area and therefore the EPA recommends that all attainment demonstrations should contain an unmonitored area analysis. The EPA encourages states to use information available to them to consider what, if any, impacts may be occurring in unmonitored areas. States can evaluate the need to perform an unmonitored area analysis by using available information such as modeling data, emissions inventories, or non-FEM monitoring data (such as from special purpose monitors or saturation monitoring studies) to indicate the potential high $PM_{2.5}$ concentrations in areas that are currently unmonitored. An unmonitored area analysis is strongly recommended where the state and/or the EPA has reason to believe that potential violations may be occurring in unmonitored areas, or other available information indicates that further analysis is warranted. The EPA will consider whether the state has adequately addressed all available information about potential exceedances of the NAAQS in unmonitored areas when determining whether the plan can be approved.

The EPA is requiring an attainment demonstration approach that relies primarily on existing monitoring sites and modeling to project attainment in future years. This approach to evaluating monitored and unmonitored areas is consistent with how EPA determines whether an area meets the $PM_{2.5}$ NAAQS for purposes of designations and redesignations. As discussed in Section II of this preamble, the EPA promulgates designations for $PM_{2.5}$ NAAQS nonattainment areas based primarily on ambient data measured at FRM and FEM monitors.[109] Although the EPA considers other information for purposes of evaluating areas with sources that contribute to those monitored violations for inclusion within the nonattainment area boundaries, the fundamental basis for designating an area as nonattainment for a $PM_{2.5}$ NAAQS is the presence of one or more FRM or FEM monitors with data showing violations of the NAAQS. Similarly, determinations of attainment of the $PM_{2.5}$ NAAQS for purposes of redesignation actions are based primarily on monitored data. When all FRM and FEM monitors in a nonattainment area measure attainment of the $PM_{2.5}$ NAAQS, the state is eligible to submit a redesignation request for the area, assuming that it has complied with all other applicable requirements for purposes of redesignation. Specifically, the EPA's approval of a redesignation request is subject to meeting the requirements of CAA section 107(d)(3)(E). Among those requirements is that the area has attained the NAAQS. For the $PM_{2.5}$ NAAQS, this determination is based on ambient data measured at the FRM and FEM monitors in the area in question.

In addition, the "relative" attainment test for $PM_{2.5}$ attainment demonstrations uses FRM or FEM ambient monitoring data, combined with future year modeled percentage changes in $PM_{2.5}$ concentrations to project future year design values. Since the attainment test relies on ambient monitoring data, an analysis of future year concentrations in unmonitored areas can only be accomplished by interpolating ambient data to a particular location where there is no existing monitor or recent monitoring data. Therefore, in the context of an attainment demonstration, the projection of future year $PM_{2.5}$ concentrations in unmonitored locations is inherently more uncertain than projections in monitored locations due to the fact that the ambient concentrations from which these projections are developed are unknown in the unmonitored locations.

While the unmonitored area analysis is not a regulatory requirement, and states are not required to identify enforceable emissions reductions to eliminate potential violations in unmonitored areas, an unmonitored area analysis has the potential to provide additional important information about $PM_{2.5}$ levels and gradients in the nonattainment area. The results of the analysis can be used to provide information to inform future monitoring plans, to examine the need for potential emissions controls, to evaluate potential environmental justice concerns, and to provide additional information to the public. The EPA believes that Option 4 provides the best balance between the regulatory requirements of the attainment demonstration and additional analyses which could provide helpful information to inform future regulatory activities.

Where information is available, states and the EPA have obligations to address potential violations in unmonitored areas, and, although we expect this to be relatively rare, attainment plans need to address air quality in unmonitored areas where information exists suggesting the potential for such violations. Where an unmonitored area analysis is performed, states should use model results and available ambient data to develop an assessment of the likelihood of violations in unmonitored areas. The nature of the assessment depends on the available information and the nature of the local $PM_{2.5}$ problem, but could include, as appropriate, elements such as an evaluation of the emissions inventory (particularly for local direct $PM_{2.5}$ sources), the existing ambient data for the area, and meteorological model inputs to evaluate the accuracy of the modeled violations in unmonitored areas. If potential violations are determined to be likely, additional steps could include imposition of emissions reductions at nearby emission sources or a commitment to deploy special purpose monitors and/or saturation monitors in the area (in order to further evaluate the problem). The state should document the assessment, including analyses of emissions, meteorological inputs and ambient data.

The $PM_{2.5}$ modeling guidance recommends a default procedure for applying an unmonitored area analysis, which combines gridded model data with interpolated ambient data. States can apply the default recommended approach or develop their own analysis which may be more appropriate for the specific area or situation. States are expected to consult with the appropriate EPA Regional Office to evaluate available information to determine if an unmonitored area analysis is needed for a particular area and how the analysis should be performed.

c. Comments and Responses.

Comment: Some commenters stated that, of the options for addressing unmonitored areas, only Option 2 is technically and legally defensible (80 FR 15382). The commenters stated the Act requires that ambient concentrations in all areas meet the applicable NAAQS and cited 42 U.S.C. 7407(a) as requiring states to assure "air quality within the entire geographic area comprising such State" will achieve the national standards and requiring "an implementation plan [to] . . . specify the manner in which national primary and secondary ambient air quality standards will be achieved and maintained"). The commenters also cited 42 U.S.C. 7410(a)(1) as requiring implementation plans to provide for implementation of the NAAQS "in each air quality control region (or portion thereof) within such State"). The commenters stated it is insufficient to suggest that an area need only show attainment at monitored locations and need only adopt controls that will address those locations.

Response: The EPA does not agree that Option 2 is the only technically and legally defensible option. The CAA requires states with nonattainment areas to submit an attainment demonstration as part of their $PM_{2.5}$ SIP. States must show that they will attain the NAAQS by their attainment date. The CAA also requires states to use air quality modeling in their attainment demonstration. But other than those general requirements, the EPA believes states have discretion to interpret how and where to show attainment of the NAAQS through modeling in support of an attainment demonstration.

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[109] A monitor must have 3 years of quality assured ambient data available to be used to calculate a $PM_{2.5}$ design value and determine compliance with the NAAQS.

In addition, the EPA believes that a monitor based attainment demonstration satisfies the CAA requirement to show that "the entire geographic area" will attain the NAAQS. The EPA's monitoring requirements for $PM_{2.5}$ are designed to ensure a robust nationwide monitoring network in both nonattainment and attainment areas. States have achieved this by maintaining their $PM_{2.5}$ networks in accordance with EPA's network design criteria. Historically, these criteria provided that CBSAs have at least one $PM_{2.5}$ monitoring site located in an "area-wide" location of expected maximum concentration (within the CBSA).[110] Thus, by assuring compliance with the NAAQS at the location of the expected highest area-wide concentration in the CBSA, air quality is protected throughout each CBSA. The EPA has identified recommended procedures for $PM_{2.5}$ modeled attainment demonstrations. These recommendations are contained in modeling guidance. The recommended attainment test relies on the ambient monitors to provide the "anchor point" for future year air quality projections. This ensures that future year concentration predictions are grounded by "real world" measurements. Since the attainment test relies on ambient monitoring data, the projection of future year $PM_{2.5}$ concentrations in unmonitored locations is inherently more uncertain than projections in monitored locations due to the fact that the ambient concentrations from which these projections are developed are unknown in the unmonitored locations. Therefore, the EPA continues to believe that for $PM_{2.5}$ attainment demonstrations, modeling results in unmonitored areas are too uncertain to use in this manner. For the reasons stated earlier, in the final rule, the EPA does not believe that it is necessary to require states to submit an unmonitored area analysis and to show that any potential violations of the NAAQS in unmonitored areas have been eliminated through enforceable controls.

Comment: Several commenters supported Option 1 where only monitored grid cells are included in the attainment plan. Commenters stated that, due to their concerns related to the accuracy of air dispersion modeling tools and protocols, it is not appropriate to use air dispersion modeling to predict receptor impacts in unmonitored areas. Some commenters stated that Option 1 is the approach that most closely describes the current EPA rule.

Response: The EPA agrees that the modeling results are too uncertain in unmonitored areas to require an unmonitored area analysis as part of the attainment demonstration (for the reasons enumerated earlier). However, the EPA disagrees that Option 1 is the approach that most closely describes the attainment demonstration requirements in the 2007 $PM_{2.5}$ implementation rule. An unmonitored area analysis has never been an implementation rule requirement, but was a recommended analysis in the $PM_{2.5}$ modeling guidance. Therefore, the EPA believes that Option 4 is closer to the current status quo. This final rule clearly states the continued recommendation to perform an unmonitored area analysis and the benefits of doing so.

Comment: Some commenters stated that an "unmonitored area analysis" is essential since speciation monitoring is conducted at a limited number of sites. The commenters stated that, however, given the inherent uncertainty from modeling analysis in unmonitored areas, results from such analysis should only be used to inform additional actions. The commenters stated that, while modeling analysis in unmonitored areas can be used as a reference for additional studies, it should not be used for the attainment demonstration in the SIP. The commenters stated that, under any of the options, the EPA should specify the recommended level of detail for an unmonitored area analysis, especially if it is required. The commenters recommended that the analysis need not require modeled results at finer spatial scales than those specified in the modeling protocol.

Response: The EPA agrees that an unmonitored area analysis is important and continues to recommend development of unmonitored area analyses to support attainment demonstrations. The EPA also agrees that due to uncertainty, the results from such analysis should only be used to inform additional actions. As stated earlier, the $PM_{2.5}$ modeling guidance contains a default recommended unmonitored area analysis technique which combines gridded modeling data and interpolated ambient data (including $PM_{2.5}$ speciation data). But the exact nature of the unmonitored area analysis can be considered based on the information relevant to each nonattainment area. The EPA also agrees that where an unmonitored area analysis is conducted, it should be at the same spatial scale (model resolution) as the modeled attainment demonstration at monitoring locations. For example, if the gridded modeling analysis is performed at 4km resolution (model grids that are 4km on a side), then the unmonitored areas should be examined at the same resolution. Similarly, if near road monitors are examined with a dispersion model at a finer resolution (compared to the other monitors) as part of the attainment demonstration, the unmonitored area analysis could also examine unmonitored near-road areas at a finer resolution.

Comment: Several commenters disagreed with the proposal to require states to perform the attainment test at "recent" monitoring locations. Commenters stated that, within the EPA's description of Option 1, the proposal indicates that the attainment test required under Option 1 would also apply to locations that have "recent" FRM and/or FEM monitoring data. Commenters stated the current FRM/FEM monitoring data should be sufficient to demonstrate attainment.

Response: States must demonstrate that they will attain the $PM_{2.5}$ NAAQS in the nonattainment area as expeditiously as practicable, and no later than the moderate area attainment date. The recommended attainment test in the modeling guidance uses recent ambient data that encompass a 5-year period that is dependent on the base modeling year. For example, for a base modeling year of 2014, the guidance recommends using ambient $PM_{2.5}$ data from the 2012–2016 period. The guidance also recommends only using ambient data from a particular monitoring site if it has at least one complete design value period during the relevant 5-year period. With these recommendations in mind, there are numerous cases where a monitoring site may have only partial data from the relevant 5-year period or may be a new monitor that started collecting data after the 5-year period or may have been shut down before the 5-year period. The EPA agrees that it is generally not necessary to examine the modeling results where monitors were shut down before the base modeling period. These monitors will not be used to make future decisions relating to attainment status of the area. However, monitors that are new or were operating during the base modeling period are still relevant and can be used to provide additional information in the attainment demonstration. The data from these monitors may serve as the basis for examining potential violations in the area as part of an unmonitored area analysis. This is especially the case for new monitors, which may not have enough data to provide a robust future year concentration estimate in the attainment demonstration. But the monitoring data, combined with modeled information, can provide information about the likelihood of future violations in the area surrounding the monitor location.

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[110] *See* fine particulate ($PM_{2.5}$) design criteria at 40 CFR part 58–Appendix D to part 58.

5. Future Year(s) To Be Modeled in Attainment Demonstrations

a. Summary of Proposal. A state performing a modeling analysis for an attainment demonstration or impracticability analysis must select a future year for the analysis. For an attainment demonstration, a state should select the future modeling year such that all emissions control measures relied on for attainment will have been fully implemented by the beginning of that year. The EPA proposed that to demonstrate attainment, the modeling results for the nonattainment area must predict that emissions controls implemented no later than the beginning of the last calendar year preceding the attainment date will result in $PM_{2.5}$ concentrations that meet the level of the standard.[111] While states should choose the future modeling year based on a number of factors, the EPA proposed the last possible year permitted under the statute as a starting point for modeling.

b. Final Rule. The EPA is finalizing the recommendation that the last possible year permitted under the statute is an appropriate starting point for modeling. *See* 40 CFR 51.1011(a)(6). For a state that is submitting an attainment demonstration, modeling the sixth calendar year is a logical starting point to determine if attainment by that year is likely. Even though attainment is determined by averaging 3 years' worth of ambient data, states do not have to model 2 years before the attainment date to show modeled attainment. Since the design value is an average of 3 years' worth of data, attainment can still be shown even if concentrations exceed the NAAQS in one or more of the 3 years used to determine attainment (as long as the 3 year average is less than the NAAQS). Therefore, it can be appropriate to model any of the 3 years used to determine attainment. In addition, if ambient data show attainment-level concentrations in the final statutory attainment year, a state may be eligible for up to two 1-year extensions of the attainment date, if the area meets the criteria for such extensions. Therefore, modeling attainment-level concentrations for the last year permitted by statute is acceptable.

States with Moderate areas that submit an impracticability demonstration must show that the area cannot attain the NAAQS by the end of the sixth calendar year following designation of the area. Therefore, the appropriate future modeling year for such a demonstration is also the sixth calendar year after designation.

For the reasons stated earlier, it is both acceptable, and will in fact be most efficient, for a state to begin the attainment demonstration process by modeling the last year permitted under the statute to determine future year modeled $PM_{2.5}$ concentrations in the sixth year after designations. For example, since designations for the 2012 $PM_{2.5}$ NAAQS were effective in March 2015, it is appropriate for states to model air quality for 2021 in the attainment demonstrations for designated nonattainment areas.

Because an area must attain "as expeditiously as practicable," additional considerations are necessary before an attainment date can be established. For purposes of determining the attainment date that is as expeditious as practicable, the state must conduct future year modeling which takes into account expected growth and known controls that are already in effect or that are adopted and will be in effect by January 1 of the future year. For example, for a Moderate nonattainment area for the 2012 $PM_{2.5}$ NAAQS, a future base case scenario for the year 2021 would project future air quality given implementation of existing federal, state and local measures. If this future base case scenario demonstrates attainment, then the state must determine if attainment can be achieved in an earlier year through the application of additional measures. Therefore, the state must conduct an analysis of RACM and RACT and additional reasonable measures to determine if, collectively, all technologically and economically feasible measures identified by the state that can be implemented by the beginning of the sixth calendar year following designations can advance the attainment date by at least 1 year (note that RACM and RACT controls must be implemented within 4 years of an area being designated nonattainment, but additional reasonable measures for an area for which a state can demonstrate attainment by the end of the sixth calendar year following designation of the area are those technologically and economically feasible measures that can be implemented by the beginning of the last year prior to the projected attainment date). Results of this analysis may indicate attainment can be achieved earlier, through implementation of all reasonable control measures (*i.e.,* RACM and RACT and additional reasonable measures).

If, on the other hand, the future base case scenario does not demonstrate attainment, then a control case scenario is needed to examine whether the reasonable, technically and economically feasible measures identified by the state would result in attainment in the analysis year (*i.e.,* in 2021 for purposes of this example based on the 2012 $PM_{2.5}$ NAAQS). The control case scenario would add potential control measures—*e.g.* RACM and RACT (which must be implemented in 4 years) and additional reasonable measures, plus any measures on sources outside of the nonattainment area that the state has identified as feasible to implement by the attainment date. This modeling, along with other relevant information, would inform a judgment as to whether attainment of the relevant NAAQS is practicable by the end of the sixth year after designation or earlier. In the case of areas designated for the 2012 $PM_{2.5}$ NAAQS, if the analysis does not demonstrate attainment by December 31, 2021, then the analysis could serve as the technical basis for the state to submit a demonstration that attainment by the outermost statutory attainment date for Moderate areas is impracticable. This in turn could serve as a technical basis for the Administrator to reclassify the area to Serious.[112] If the analysis does demonstrate attainment, then the remaining step is to assess whether the attainment date can be advanced by 1 year.

In conducting this assessment, the EPA believes that it is not reasonable to require states to model each and every calendar year to determine the appropriate attainment date. Developing and modeling future year inventories is a time-consuming and resource intensive process. Multiple emissions models are needed in order to generate year specific emissions for the various emissions sectors (*e.g.* mobile, non-road, non-EGU point and EGU point). In some cases it may be reasonable to model one additional interim year before the maximum statutory attainment date.[113] However, in most cases, the air quality benefits of an identified set of RACM and RACT and additional reasonable measures can be estimated through model sensitivity analyses and the development of sensitivity factors (*i.e.,* factors to relate tons of emissions reductions in the area to $PM_{2.5}$ concentration changes in the area). For example, states can model across the board percentage reductions in direct $PM_{2.5}$ and/or precursor emissions (in separate model runs or using advanced modeling techniques such as DDM) to determine the impact of emissions reductions on $PM_{2.5}$ concentrations in the area. This modeling can be performed with a single attainment year modeling platform, which is much less resource intensive than modeling additional future years. The identified potential emissions reductions available from RACT and RACM and additional reasonable measures can be compared to the magnitude of the modeled $PM_{2.5}$ reductions from the sensitivity analyses to determine if all such controls will advance attainment by a year. The EPA strongly recommends that states discuss the selection of the future year(s) to model with their EPA Regional Office as part of the modeling protocol development process and before embarking on the modeling.

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[111] Note that for purposes of the $PM_{2.5}$ NAAQS, a determination of attainment (or failure to attain), which the EPA is required to make after the attainment date has passed, is based on an average of the most recent 3 years of ambient data prior to the area's attainment date.

[112] A demonstration that the area cannot attain by the moderate area attainment date would not be the only trigger for a reclassification to serious nonattainment. The Administrator maintains wide discretion in making a determination that an area cannot practicably attain the NAAQS by their attainment date.

c. Comments and Responses.

Comment: Some commenters disagreed with the proposal that the future year should reflect when all control measures relied on have been fully implemented by the beginning of that year and it should be no later than the beginning of the last calendar year preceding the attainment date. The commenters stated the CAA provides attainment must be achieved as expeditiously as practicable but no later than the end of the sixth calendar year (except RACT/RACM are required within 4 years) and states should be given the full period to demonstrate attainment and to require control of emissions.

Response: The proposal to require the modeling to reflect control measures that have been fully implemented no later than the beginning of the last calendar year preceding the attainment date does give nonattainment areas "the full period" to demonstrate attainment and to require control of emissions. Since the design value is an average of 3 years' worth of data, it could be argued that modeling and related emissions controls should be in place 3 years before the attainment date. However, if ambient data show attainment level concentrations in the final statutory attainment year, a state may be eligible for up to two 1-year extensions of the attainment date, if the area meets the criteria for such extensions. Therefore, modeling attainment level concentrations for the last year permitted by statute is acceptable. But in order to measure attainment level concentrations in the final year, controls must be in place for the full year (at the beginning of the year). Implementation of emissions controls at the end of the year would not be consistent with modeling attainment level or measuring attainment level concentrations during the year.

6. Attainment Year Motor Vehicle Emissions Budgets

The transportation conformity rule requires that attainment plans establish motor vehicle emissions budgets for the area's attainment year. Therefore, once an area's attainment date has been established, the state would establish motor vehicle emissions budgets for direct $PM_{2.5}$ and any relevant $PM_{2.5}$ precursor for the attainment year.[114] It should be noted that states that submit impracticability demonstrations for Moderate areas under CAA section 189(a)(1)(B)(ii) are not required to submit motor vehicle emissions budgets for attainment purposes because the submitted SIP does not demonstrate attainment. A motor vehicle emissions budget for the purposes of a $PM_{2.5}$ attainment plan is that portion of the total allowable emissions within the nonattainment area allocated to on-road sources as defined in the submitted attainment plan. Such motor vehicle emissions budgets would be calculated using the latest planning assumptions and the latest approved motor vehicle emissions model available at the time that the attainment plan is developed, unless EPA approves the state's use of an alternative model.[115]

F. RFP Requirements

1. Background on Statutory Requirements and Existing Guidance

Reasonable further progress (RFP) is a concept included in the CAA under part D, title I to assure that states make steady, incremental progress toward attaining air quality standards in the years prior to the attainment date for a nonattainment area, rather than merely deferring implementation of control measures and therefore emissions reductions until the date by which the standards are to be attained. As discussed elsewhere in this preamble, section 172 of the CAA addresses attainment plan provisions in general. Section 172(c)(2) of the CAA requires attainment plans to provide for RFP, which is defined in CAA section 171(l) as "such annual incremental reductions in emissions of the relevant air pollutant as are required by [part D of title I] or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable national ambient air quality standard by the applicable date." Section 189(c) of the CAA requires that "[P]lan revisions demonstrating attainment submitted to the Administrator for approval under this subpart shall contain quantitative milestones which are to be achieved every 3 years until the area is redesignated attainment and which demonstrate reasonable further progress, as defined in CAA section 171(1), toward attainment by the applicable date." Quantitative milestones are discussed later in Section IV.G of the preamble.

Section 172(c)(3) of the CAA requires the state plan to include "a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants *in such area* . . ." Section 172(c)(1) of the CAA requires the state plan to include "all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources *in the area* as may be obtained through the adoption, at a minimum, of reasonably available control technology) . . ." Section 172(c)(9) requires the state plan to "provide for the implementation of specific measures to be undertaken if the area fails to make reasonable further progress . . . Such measures shall be included in the plan revision as contingency measures to take effect in any such case without further action by the State or the Administrator.'' For additional background on statutory requirements and existing guidance, refer to preamble Section IV.F of the proposal for this rule.[116]

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[113] If several future modeling years are available, it may in some cases be appropriate for states to interpolate $PM_{2.5}$ concentrations between years.

[114] For more information on $PM_{2.5}$ precursor requirements, *see* CAA section 93.102(b)(2)(iv) and (v) of the transportation conformity rule. *See* also the May 6, 2005, final transportation conformity rule that addressed requirements for $PM_{2.5}$ precursors. (70 FR 24280).

[115] If an area includes re-entrained road dust in the motor vehicle emissions budget, the latest approved version of AP–42 should be used unless the EPA has approved an alternative model for the area.

2. General Approach to RFP

a. Summary of Proposal. To satisfy the statutory requirements for RFP at CAA section 172(c)(2), the EPA proposed that a state must submit an RFP plan as part of its Moderate area attainment plan submission. The EPA proposed the following two options for developing an RFP plan.

Under the first option, the EPA proposed that the RFP analysis for any Moderate $PM_{2.5}$ nonattainment area that can demonstrate attainment by the statutory attainment date must demonstrate either: (i) Generally linear progress toward attainment; or (ii) stepwise progress toward attainment. Stepwise emissions reductions would be slower than ''generally linear'' reductions for certain periods, and then would decline sharply (due to implementation of a new emission reduction program, or new operation of control technology on one or more stationary sources). The EPA proposed that a state must follow one primary approach for conducting the RFP analysis, but that they also have an option to conduct a secondary analysis that will provide greater flexibility in setting RFP goals with alternative emissions reductions and air quality improvement scenarios. The primary approach would be to show that nonattainment area emissions of each pollutant decline from the base year to the attainment year, either in a generally linear manner or in a stepwise manner. In the optional secondary analysis, the state could show that emissions of the various pollutants would change in a manner that would provide a change in air quality during the attainment period that is equivalent or more expeditious than the air quality change that would be estimated to occur under the primary approach. This optional analysis was referred to as an equivalency determination.

Under the second proposed option, the state would provide the control strategy implementation schedule and estimate the emissions reductions anticipated from the control measures (*i.e.,* RACM/RACT and additional reasonable measures) for sources in the nonattainment area. The state then would employ modeling or another quantitative method to predict the overall $PM_{2.5}$ concentrations in the nonattainment area for each milestone year. The milestone years would correspond to the years for which the state would be required to provide quantitative milestones pursuant to the requirement in section 189(c) of the Act.

b. Final Rule. The EPA is finalizing RFP requirements that allow the state flexibility to demonstrate RFP under CAA section 172(c)(2) using any of the general approaches included in the proposed rule. As part of its Moderate area attainment plan submission, the state must submit an RFP plan that includes three components: (1) An implementation schedule for control measures on sources in the nonattainment area, (2) RFP projected emissions for each applicable quantitative milestone year determined in Section IV.G of this preamble, based on the anticipated control measure implementation schedule; and (3) an analysis that demonstrates that this schedule of aggregate emissions reductions achieves sufficient progress toward attainment between the applicable baseline year to the attainment year. *See* 40 CFR 51.1012(a).

The first component of the RFP plan is the implementation schedule for all required control measures contained in the control strategy. The schedule should describe which measures will be implemented within the first 4 years following designation (and therefore would meet the statutory requirement for RACM and RACT). It should also describe the implementation schedule of additional reasonable measures (to be implemented more than 4 years following designation but before the attainment date) that have been adopted to help provide for expeditious attainment of the standard. Any Moderate area that cannot demonstrate attainment by the statutory Moderate area attainment date is required to provide an implementation schedule for all of the control measures identified as RACM/RACT and additional reasonable measures, in the same manner as an area that can demonstrate attainment.

The second component of the RFP plan is an analysis by the state identifying the RFP projected emissions by pollutant that are expected to be achieved by the control measures implemented within the nonattainment area according to the implementation schedule. The EPA requires the state to estimate these RFP projected emissions for each quantitative milestone year (*i.e.,* for a Moderate area, at 4.5 years and 7.5 years after designation of the area) by sector on a pollutant-by-pollutant basis. These milestone year projected emissions are discussed further in Section IV.F.3 of the preamble. This information will be used by the state to show that the area is complying with quantitative milestone and RFP requirements for the area (discussed in Section IV.G of this preamble).

The final component of the RFP plan is an analysis demonstrating that the schedule of emissions changes achieves reasonable progress toward attainment between the applicable baseline year and the attainment year. This demonstration can be expressed in the form of emissions reductions only, or emissions reductions converted to air quality concentrations. This optional air quality RFP analysis is discussed later in this section.

Because the statute does not clearly establish the applicable baseline year from which to begin calculating annual emissions reductions for purposes of demonstrating RFP, the EPA is finalizing a requirement that states use the same year as the base year inventory used for developing the control strategy and associated air quality modeling demonstrating that the area will attain expeditiously.

A demonstration based on only emissions reductions must show that the implementation schedule achieves either: (i) Generally linear progress toward the projected attainment date; or (ii) stepwise progress toward the projected attainment date. For example, in one area new emission standards for mobile sources may achieve reductions in a generally linear manner over time, as a portion of the existing vehicle fleet is replaced each year with new vehicles meeting the more stringent standards. In another area, regulations to reduce emissions from certain stationary source sectors could have a single compliance date by which controls must be in place, which could result in a significant drop in emissions in a ''stepwise'' manner over a relatively short period.

In the first case, the EPA expects that, so long as the attainment date is as expeditious as practicable, then generally linear progress toward attainment by that date would satisfy the RFP requirement. In the second case, where progress is slower than generally linear, the state is required to submit a clear rationale and supporting information to explain why generally linear progress is not appropriate (*e.g.,* due to the nature of the nonattainment problem, the types of sources contributing to $PM_{2.5}$ levels in the area and the implementation schedule for control requirements at such sources).

Similarly, for areas that cannot demonstrate attainment within the

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[116] 80 FR 15385.

Moderate area statutory deadline in CAA section 188(c)(1), the state must demonstrate either generally linear or stepwise emissions reductions toward the full amount of reductions that will be achieved by that deadline, *i.e.*, the amount that reflects implementation of all of the control measures identified as RACM and RACT and additional reasonable measures for the entire period of the applicable attainment plan. Generally linear progress toward this full amount would meet the RFP requirement, but progress that is slower than that would require further justification.

In some circumstances, the EPA expects that a state could develop an approvable RFP plan even if emissions of one or more $PM_{2.5}$ plan precursors are not decreasing. In this scenario, the state must demonstrate that the emissions reductions of direct $PM_{2.5}$ combined with the aggregate emissions reductions of $PM_{2.5}$ plan precursors support expeditious attainment of the applicable $PM_{2.5}$ NAAQS. To accomplish this, the EPA expects that a state could use the relative air quality impacts of the different $PM_{2.5}$ plan precursors identified in the attainment modeling to demonstrate that the emissions reductions of direct $PM_{2.5}$ and aggregate $PM_{2.5}$ plan precursors constitute an acceptable RFP plan. For example, the state could demonstrate that even if one or more $PM_{2.5}$ plan precursor is not decreasing, the emissions reductions of direct $PM_{2.5}$ and the remaining $PM_{2.5}$ plan precursors are the dominant factors in reducing ambient $PM_{2.5}$ levels and are therefore adequate to support expeditious attainment. In providing this flexibility, the EPA recognizes that control measures for certain pollutants may be more effective at reducing $PM_{2.5}$ concentrations than others, and that states may be able to implement some measures more quickly than others while still achieving reasonable overall progress toward attainment.

The EPA is also providing an additional optional RFP analysis that evaluates the collective changes in emissions of multiple pollutants during the attainment period in terms of changes in air quality concentration. Under this optional approach, a state would have to show that the air quality improvement that is anticipated by milestone dates due to the identified control measures in the implementation schedule supports expeditious attainment of the $PM_{2.5}$ NAAQS. For an area that can demonstrate attainment within the Moderate area statutory deadline, a state using this option could rely upon attainment demonstration modeling results that link emissions reductions with air quality improvements. For areas that cannot demonstrate attainment within the Moderate area statutory deadline, the state may have to conduct modeling or employ another quantitative method to predict the overall $PM_{2.5}$ concentrations in the nonattainment area in each milestone year. The state would compare these air quality target values to certified ambient air quality monitoring data as part of the quantitative milestone report due after the area reaches each quantitative milestone date. The EPA recommends that states estimate air quality targets by establishing the relationship between modeled emissions reductions and air quality changes in the attainment plan (for the attainment year) and interpolating to the intermediate year(s) based on the same relationship.

The EPA recognizes that because atmospheric processes are complex, a specific percent change in emissions of $PM_{2.5}$ precursors does not lead to an equivalent percent change in air quality, potentially creating uncertainty when determining air quality targets based upon predicted emissions reductions. Nevertheless, the EPA recognizes the importance of providing the flexibility to address different pollutants on different timetables so long as the plan can reasonably be expected to achieve the intended air quality benefits represented by the RFP analysis.

As previously noted, submission of the air quality-based RFP plan is optional. However, in certain circumstances, the applicable Regional Administrator may strongly recommend that a state or local agency submit an RFP plan with air quality targets for milestone years in order to satisfy the statutory RFP requirement. This approach could be appropriate when one or more pollutants is not decreasing over the attainment planning period or for areas that have experienced longstanding and persistent $PM_{2.5}$ pollution problems despite the prior implementation of required control measures. The EPA will review each RFP plan on a case-by-case basis to determine whether it provides for such annual incremental reductions in emissions of the relevant air pollutant(s) as are necessary for the purpose of ensuring attainment by the applicable attainment date. *See* 40 CFR 51.1012. An additional RFP analysis will be required as part of a Serious area attainment plan if EPA reclassifies the area to Serious.

c. Comments and Responses.

Comment: Some commenters generally supported the equivalency determination concept because they noted that different precursors are more or less effective in reducing atmospheric concentrations of $PM_{2.5}$. Some commenters stated that, because the goal is timely attainment regardless of when controls are implemented for each precursor that is to be controlled, the EPA should allow both options, including the option for states to determine whether to approach the demonstration on a pollutant-by-pollutant basis, or overall.

Response: The final rule allows for emissions from one or more $PM_{2.5}$ plan precursors to increase over the attainment planning period, as long as the emissions of direct $PM_{2.5}$ and aggregate $PM_{2.5}$ plan precursors decrease consistent with RFP and the state can demonstrate that the emissions increase does not delay expeditious attainment. This approach recognizes the fact that different precursors have different impacts on $PM_{2.5}$ concentrations depending upon the specific atmospheric chemistry of each area. As previously noted, submission of the air quality-based RFP plan is optional but may be strongly recommend by the applicable Regional Administrator depending upon the unique circumstances of the nonattainment area.

Comment: One commenter suggested that the equivalency determination must be based on modeling of ambient concentrations, not simply on inter-pollutant equivalency ratios.

Response: The EPA recognizes the importance of modeling and notes that there are potential benefits of using modeling when providing the optional air quality analysis. Additionally, in the preamble, the EPA described when these types of tools could be useful in the development the air quality targets. Because the development of air quality targets is optional and complements the emissions reductions analysis, the EPA does not require modeling of ambient conditions for this purpose.

Comment: A few commenters supported the proposed Option 1 and the allowance for either generally linear or stepwise progress toward attainment. These commenters stated that allowing both methods is consistent with the pattern of many federal emissions reduction measures and it provides the most flexibility to states. Other commenters stated that existing guidance in the Addendum failed to recognize that, in many cases, more can be accomplished during one given year than in another. The commenters suggested the EPA provide states with the flexibility to manage their resources for rulemaking such that emissions reductions are obtained to attain generally linear progress averaged over the 3-year period rather than in each individual year.

Response: As stated earlier, this rule requires that the RFP analysis must demonstrate either generally linear or stepwise emissions reduction progress toward attainment. If there are significant differences between emissions reductions in different years, which make the emissions reductions no longer generally linear, then the state would have to provide a justification for the stepwise progress as discussed earlier. Therefore, the suggestion of averaging the emissions reductions to obtain generally linear progress over a 3-year period is not an acceptable way to demonstrate RFP. In this example, the state would have to submit a justification of why stepwise emissions reductions are more appropriate for their area. However, the EPA notes that if stepwise emissions reductions are achieved more rapidly than expected and consistent with the amount necessary to demonstrate RFP toward timely attainment, this would be in line with the overall principles of the CAA and would not require the aforementioned justification.

3. RFP Projected Emissions for RFP Analyses

a. Summary of Proposal. The EPA proposed that a state with a Moderate $PM_{2.5}$ nonattainment area must submit RFP projected emissions for sources within the nonattainment area as part of the RFP plan. The EPA also proposed that these RFP projected emissions would, at a minimum, include projected emissions of each pollutant by different source types corresponding to the quantitative milestone dates for the area.

b. Final Rule. The EPA is finalizing that a state with a Moderate $PM_{2.5}$ nonattainment area must submit RFP projected emissions for sources within the nonattainment area as part of the RFP plan. These RFP projected emissions shall, at a minimum, include projected emissions of each pollutant (*i.e.,* direct $PM_{2.5}$ and $PM_{2.5}$ plan precursors) by different source types corresponding to the quantitative milestone dates for the area (quantitative milestone dates are described in greater detail in Section IV.G of this preamble). Specifically, the EPA requires that the RFP plan for any Moderate area must contain RFP projected emissions for each calendar year in which quantitative milestones for a Moderate nonattainment area must be met. As explained in Section IV.G of this preamble, a state must identify as part of the attainment plan submission for a Moderate nonattainment area quantitative milestones to be achieved every 3 years from the Moderate area attainment plan due date, or 4.5 years from the effective date of designation of the area.[117] For example, the first round of designations for the 2012 $PM_{2.5}$ NAAQS became effective in April 2015; Moderate area attainment plans for these areas will thus be due 18 months later, or in October 2016. The first quantitative milestones for each of these areas will then have to be met in October 2019; the second quantitative milestones, in October 2022; and so on, until the area attains the NAAQS. Under this approach, the state will be required to submit such RFP projected emissions as part of the Moderate area attainment plan due in October 2016 that project emissions from sources in the nonattainment area for the same calendar years as those for which quantitative milestones will be due (*i.e.,* 2019 and 2022 inventories in this example).

The transportation conformity rule requires that RFP plans establish motor vehicle emissions budgets. RFP plans would therefore be required to establish motor vehicle emissions budgets for direct $PM_{2.5}$ and any relevant $PM_{2.5}$ precursor as determined under the transportation conformity rule.[118] Precursors that are relevant for transportation conformity purposes would be limited to the $PM_{2.5}$ plan precursors but may not include all of the $PM_{2.5}$ plan precursors. For example, it is likely that many $PM_{2.5}$ plans will include SO_2 as a plan precursor. However, emissions of SO_2 from on-road sources are usually low compared to stationary sources. The transportation conformity rule allows for the state to determine through its SIP development process if it is necessary to establish motor vehicle emissions budgets for SO_2. *See* 40 CFR 93.102(b)(2)(v). On the other hand, if a state provides a precursor demonstration approved by the EPA which shows that VOCs do not have a significant contribution to $PM_{2.5}$ levels in a particular nonattainment area, then a motor vehicle emissions budget for VOCs would not need to be established for the area for transportation conformity purposes. A motor vehicle emissions budget for the purposes of a $PM_{2.5}$ RFP plan is that portion of the total allowable emissions allocated to on-road sources as defined in the submitted RFP plan for the relevant years as described earlier.[119] Such motor vehicle emissions budgets will be calculated using the latest planning assumptions and the latest approved motor vehicle emissions model available at the time that the attainment plan is developed, unless the EPA approves the state's use of an alternative model.[120]

c. Comments and Responses.

Comment: Some commenters stated that since RFP is one of the general attainment plan provisions listed in CAA section 172(c), the EPA's proposal to require motor vehicle emissions budgets as part of RFP plans extends beyond just the implementation of the $PM_{2.5}$ NAAQS and, as a result, this proposal should be presented within the context of a revision to the conformity rule itself and not just this $PM_{2.5}$ implementation rule.

Response: The EPA disagrees with the commenters. The transportation conformity rule already states that motor vehicle emissions budgets come from control strategy SIPs.[121] Additionally, the transportation conformity rule defines control strategy SIPs as RFP plans and attainment demonstrations. It goes further to say that control strategy SIPs include the SIPs required by CAA sections 172(c), 189(a)(1)(B) and 189(b)(1)(A). The requirement in this $PM_{2.5}$ SIP Requirements Rule does not amend the transportation conformity rule; it merely explains what is already required.

4. Geographic Coverage of Emission Sources for RFP

a. Summary of Proposal. The EPA proposed that the RFP demonstration to be included with a state's $PM_{2.5}$ nonattainment area plan must include emissions only for sources located in the nonattainment area, and not from an area larger than the nonattainment area. This proposed policy approach differed from the remanded 2007 $PM_{2.5}$ implementation rule. As explained in the proposal, the difference was due to the evolution of policy on a similar RFP issue in the ozone NAAQS implementation program that stemmed in part from a petition for reconsideration and a DC Circuit decision on the November 2005 Phase 2 Ozone Implementation Rule. The EPA received a similar petition for reconsideration of the 2007 $PM_{2.5}$ Implementation Rule, which dealt with the EPA's interpretation of the statutory RFP requirements to allow a state to take "credit" for emissions reductions from outside the nonattainment area when addressing RFP in its attainment plan.[122] The EPA granted the petition for reconsideration on this issue in 2010, after the DC Circuit issued its decision on litigation on the Phase 2 Ozone Implementation Rule.[123] [124] In light of these developments, the proposal indicated that the EPA now believes the best reading of the statute is that the CAA does not allow for a state to include emissions reductions from sources outside a nonattainment area when developing the plan to meet the CAA section 172(c)(2) RFP requirements for a $PM_{2.5}$ nonattainment area.

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[117] According to CAA section 189(a)(2)(B), Moderate area attainment plans are due to the EPA 18 months after designation.

[118] For more information on $PM_{2.5}$ precursor requirements, *see* CAA section 93.102(b)(1) and (b)(2)(iv) and (v) of the transportation conformity rule. *See* also the May 6, 2005, final transportation conformity rule that addressed requirements for $PM_{2.5}$ precursors. (70 FR 24280).

[119] A state would also establish motor vehicle emissions budgets for an area's attainment year. Those budgets would be the motor vehicle emissions that the SIP establishes as being necessary to attain the NAAQS.

[120] If an area includes re-entrained road dust in the motor vehicle emissions budget, the latest approved version of AP–42 should be used unless the EPA has approved an alternative model for the area.

[121] 40 CFR 93.101.

b. Final Rule. The EPA is finalizing that the RFP demonstration to be included with a state's $PM_{2.5}$ nonattainment area plan must include emissions only for sources located in the nonattainment area, and not from an area larger than the nonattainment area. Commenters disagreed with limiting the RFP demonstration to include emissions only for sources located in the nonattainment area stating that some areas are so dominated by upwind emissions and local sources over which they have no control, such as motor vehicles, that they cannot demonstrate RFP. One of these commenters noted they have provided extensive comments on this issue in connection with the EPA's proposal for the recent ozone implementation rule and incorporated by reference their prior comments. Other commenters agreed with the proposal and stated the EPA's conclusion is compelled by CAA sections 172(c)(1), 172(c)(3) and 189(d), which all focus on emissions and reductions in the area.

In the preamble to the remanded 2007 $PM_{2.5}$ Implementation Rule, the EPA allowed states to incorporate reductions of NO_X and SO_2 emissions up to 200 km from outside the nonattainment area (and potentially for reductions of VOC or ammonia) into their RFP plan when certain conditions were met. This policy was included in the 2007 $PM_{2.5}$ Implementation Rule in part to be consistent with a similar RFP policy for NO_X and VOC that was included in the November 2005 Phase 2 ozone NAAQS implementation rule, which provided guidance for states on implementing the 1997 ozone NAAQS.[125] Under this policy, if a state intended to include emissions reductions from outside the nonattainment area in the RFP plan, the state would need to take on the additional accounting work associated with developing: (i) An expanded baseline emissions inventory for the entire geographic area and, (ii) a projected attainment year inventory for this expanded area outside the boundaries of the designated nonattainment area. Development of these more extensive inventories would likely have involved a substantial amount of additional time and resources. In addition, the state would have needed to provide information supporting its decision regarding how far outside the nonattainment area the RFP inventory should extend. While this "outside the nonattainment area" RFP approach was theoretically available to states in developing their $PM_{2.5}$ attainment plans due in 2008, there were no states to the agency's knowledge that elected to follow this approach.

Both the Phase 2 ozone implementation rule and the 2007 $PM_{2.5}$ Implementation Rule were challenged on several issues. With regard to the Phase 2 ozone implementation rule, the EPA granted a petition for reconsideration and ultimately issued a final notice of reconsideration in June 2007. In November 2008, the U.S. Court of Appeals for the DC Circuit heard oral argument concerning multiple petitions for judicial review of the Phase 2 ozone rule and the notice of reconsideration. One of the issues in that case involved whether compliance by EGUs with a regional emissions trading program could be considered to meet the RACT requirement for those sources located in a nonattainment area. In its July 2009 decision, the court emphasized that: "The RACT requirement calls for reductions in emissions from sources in the area; reductions from sources outside the nonattainment area do not satisfy the requirement. Accordingly, participation in the NO_X SIP call would constitute RACT only if participation entailed at least RACT-level reductions in emissions from sources within the nonattainment area."

In light of this court decision, the EPA has determined that the best reading of the statute is that the term "sources in the area" should be interpreted in the same manner as ozone. The term appears in CAA section 182 (requirements for ozone nonattainment areas) with regard to RFP as well as RACT. The decision on the Phase 2 ozone rule found that CAA section 182(b)(2) requires that a SIP must provide for implementation of RACT (under CAA section 172(c)) for emissions sources "in the area," meaning in the nonattainment area. Similarly, the EPA position is that when CAA section 182(b)(1)(A)–(B) defines baseline emissions for RFP as "the total amount of actual VOC or NO_X emissions from all anthropogenic sources in the area," this also means sources in the nonattainment area.

Turning to $PM_{2.5}$, the EPA has determined that the DC Circuit's interpretation of the phrase "sources in the area" should apply to RACT and RFP requirements for both the ozone NAAQS and the $PM_{2.5}$ NAAQS. In particular, for $PM_{2.5}$, the statutory language at CAA section 171(1) defines RFP in terms of "reductions in emissions" required in an attainment plan, which the EPA interprets as being directly linked to the baseline emissions inventory for sources located in a $PM_{2.5}$ nonattainment area. The baseline emissions inventory is the foundation for the attainment plan. The emissions inventory requirement of CAA section 172(c)(3) explicitly requires that the attainment plan inventory include all sources of the relevant pollutants "in such area," which is a clear reference to the designated nonattainment area. Given that the baseline inventory must reflect the emissions "in such area," and that this inventory provides the starting point for a state's RFP analysis, in which the state must calculate generally linear progress in emissions reductions that will lead to attainment of the NAAQS in the area, the EPA believes it is appropriate that a state should consider only sources located within the nonattainment area when conducting its analysis to determine the annual emissions reductions necessary for demonstrating RFP.

Beyond the Court's interpretation, the EPA believes that the most appropriate approach with regard to the geographic area required to be covered for demonstrating RFP in a $PM_{2.5}$ attainment plan also should be limited to the nonattainment area for two other reasons. First, the EPA believes that it makes policy sense for the $PM_{2.5}$ implementation rule approach to be consistent with the approach finalized in the 2008 NAAQS for Ozone: SIP Requirements rule.[126] Second, a policy allowing the geographic area of the RFP plan to be larger than the nonattainment area would conflict with a key provision of subpart 4 that requires annual incremental reductions in emissions from sources within the nonattainment area. Under subpart 4, an area that fails to attain the standard by the Serious area attainment date is then subject to the provisions of CAA section 189(d). Section 189(d) of the CAA specifies that the state must submit a plan revision within 12 months which provides for "an annual reduction in PM_{10} or PM_{10} precursor emissions *within the area* of not less than 5 percent of the amount of such emissions as reported in the most recent inventory prepared *for such area"* (emphasis added). Therefore, the EPA is finalizing an RFP policy approach that is consistent with CAA section 189(d).

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[122] This same petition raised concerns regarding the criteria used to determine the economic feasibility of controls being considered for RACT for the 1997 $PM_{2.5}$ NAAQS. *See* "Petition for Reconsideration," filed by Paul Cort, Earthjustice, on behalf of the American Lung Association, Medical Advocates for Healthy Air, Natural Resources Defense Council, and the Sierra Club (June 25, 2007). A copy of the petition is in the docket for this action.

[123] Letter dated May 13, 2010, from Gina McCarthy to David S. Baron and Paul Cort, Earthjustice. A copy of the letter is located in the docket for this action.

[124] *See NRDC* v. *EPA*, 571 F.3d 1245 (D.C. Cir. 2009).

[125] *See* Phase 2 Ozone Implementation rule, 70 FR 71612 (November 29, 2005).

c. Comments and Responses.

Comment: Some commenters supported the EPA's general guidance for developing the RFP demonstration. In particular, these commenters agreed with the EPA's interpretation of the CAA to require that emissions reductions for purposes of meeting the RFP requirement must come from sources within the designated nonattainment area. Thus, the commenters supported the EPA's proposal that the RFP demonstration submitted by states as a part of the attainment plan cannot take credit for emissions reductions occurring outside the nonattainment area to meet the RFP requirement. These commenters asserted that the EPA's conclusion is compelled by sections 172(c)(1), 172(c)(3) and 189(d), which all focus on emissions and reductions in the designated nonattainment area. The commenters further stated the EPA has not identified any rational way for states to pick and choose what sources and related emissions outside the designated nonattainment area would need to be included in inventories and attainment planning in order to rationally measure RFP.

Other commenters disagreed with the EPA's interpretation of the CAA on this issue and advocated that the EPA should provide an option for states to meet the RFP requirement with emissions reductions from sources outside the designated nonattainment area in addition to reductions from sources inside the area. One commenter suggested the EPA should provide this option to states and also consider alternatives to simplify the "overly complicated analysis" needed to support this option in the now superseded 2007 $PM_{2.5}$ implementation rule. The comment did not address the consistency of such an interpretation of the RFP requirements with the statute.

Another commenter asserted that the EPA should interpret the statute to permit states to meet the RFP requirement through emissions reductions from sources outside the designated area based upon several practical arguments. The commenter stated that, as the $PM_{2.5}$ standards become lower and reductions from sources within a designated nonattainment area become more challenging to find, it may be necessary to obtain emissions reductions from sources beyond the designated area in order to attain the NAAQS. According to the commenters, some nonattainment areas are so dominated by emissions from outside the area and from local sources over which they have no control that they cannot demonstrate RFP, even though they could demonstrate timely attainment due to reductions from sources outside the nonattainment area. The commenters thus argued that the EPA should provide states with the option to meet the RFP requirement with emissions reductions from sources outside the nonattainment area in cases where they believe it would be unreasonable or impossible to do so only with emissions reductions from within the nonattainment area.

In response to the EPA's request for comment on any potential legal basis for authorizing states to meet the RFP requirement with emissions reductions from outside the nonattainment area, the commenter suggested potential theories. The primary legal theory was that EPA should by regulation redefine the term "area" for purposes of the RFP requirement so that it would encompass geographic areas that are not part of the designated nonattainment area. Through this theory, the commenters suggested that the EPA could authorize states to meet the RFP requirement based on reductions from the "total area" affecting that nonattainment area, rather than from the actual designated nonattainment area. As an alternative theory, the commenter argued that the EPA could regulatorily redefine the emissions inventory requirement of section 172(c)(3). To support this theory, the commenter disagreed with the EPA's position that because the base year inventory required by section 172(c)(3) includes the emissions from sources within the designated nonattainment area, it supports the EPA's reading of the statute with respect to the RFP requirement. The commenter instead argued that because the emissions information used for modeling purpose includes emissions from a much broader region (not just within the nonattainment area or even just within the state), the EPA was wrong to say in the proposal that the base year inventory for sources in the area is the "foundation for the attainment plan." Finally, the commenter argued more broadly for the EPA to alter its interpretation of the statutory language to allow for the commenter's preferred approach to RFP. In support of their preferred approach to the RFP requirement, the commenters noted that the EPA acknowledged in the proposal that "a literal interpretation is illogical" for other statutory requirements. To support this contention, the commenters point to the criteria in section 188(d) that provide the criteria for an extension of the Moderate area attainment date that require significant interpretation in order to make them appropriate for the statistical form of the current $PM_{2.5}$ NAAQS rather than for the exceedance-based form of the PM_{10} NAAQS that existed when the CAA was amended in 1990.

Response: The final rule requires that states demonstrate that they meet the RFP requirement through emissions reductions from sources in the nonattainment area. The EPA has decided to adopt this approach for two reasons. First, it is the most consistent with the statute. It aligns with RFP as defined in CAA section 171(1) and as required in CAA section 172(c)(2) and 189(c), and is also most consistent with other related requirements for attainment plans, such as the requirements for imposition of emission controls, *e.g.,* RACM and RACT, and with the process for designations of nonattainment areas pursuant to section 107(d). Second, this approach is more straightforward to administer because it retains a nonattainment area focus to the RFP requirement and, while the alternative approaches would require complex and potentially burdensome requirements to define the scope of the out-of-area sources that must be inventoried and accounted for in the determination of what constitutes RFP. The EPA has concluded that such emissions reductions from sources outside the nonattainment area are more properly accounted for and reflected in other elements of the attainment plan, such as the attainment demonstration modeling which will take into account the emissions reductions that occur outside the nonattainment area in a less burdensome fashion.

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[126] *See* 80 FR 12264.

The EPA does not agree with the statutory interpretation of the RFP requirement preferred by the commenters who suggested that the EPA allow credit for emissions reductions from outside the area. Pursuant to section 171(1), the statute defines the term "reasonable further progress" to mean "such annual incremental reductions in emissions . . . as are required by this part or may reasonably be required by the Administrator for the purposes of ensuring attainment of the applicable [NAAQS] by the applicable date." This provision plainly provides EPA with discretion to interpret this term within certain statutory parameters, *i.e.*, "as are required by this part," and consistent with the EPA's determination of what will be the appropriate approach for timely attainment, *i.e.*, "for the purpose of ensuring attainment . . . by the applicable date." Thus, for example, the EPA has authority to interpret the RFP requirement to allow states to demonstrate generally linear reductions or stepwise reductions, rather than as a specific percentage of emissions reductions each year, as appropriate methods for meeting the RFP requirement for purposes of the subpart 1 and subpart 4 provisions applicable to the $PM_{2.5}$ NAAQS. It does not follow, however, that EPA is obligated to interpret the term "reasonable further progress" in other ways that the EPA considers inconsistent with other relevant statutory requirements for attainment plans or more broadly.

To the contrary, the EPA believes that interpretation of the RFP requirement to reflect reductions in emissions "as are required by this part," properly includes consideration of the context and structure of the statute with respect to the other attainment plan requirements. As explained in the proposal for this action, the EPA has concluded that several other related requirements for attainment plans support an interpretation of the RFP requirement for purposes of $PM_{2.5}$ to be limited to emissions reductions from sources located within the nonattainment area. These requirements include the emissions inventory requirement of section 172(c)(3), the RACM/RACT requirement of section 172(c)(1) and section 189(a)(1)(C), and the not less than 5 percent emission reduction requirement of section 189(d).

With respect to the inventory requirement of section 172(c)(3), the EPA explained in the proposal its view that because the emissions inventory requirement explicitly refers to a comprehensive, accurate, and current emissions inventory of emissions "from all sources of the relevant pollutant or pollutants in such area," this statutory language supports the view that the primary focus of the attainment plan is reductions of emissions from the nonattainment area, not emissions reductions from sources elsewhere. Similarly, EPA explained in the proposal its views that the court's decision in *NRDC* v. *EPA*, 571 F.3d 1245 (D.C. Cir. 2009) supports an interpretation of the RFP requirement to apply to emissions reductions from sources within the area. Although that decision focused on the RACT requirement for ozone in particular, the reasoning of the court's decision based upon the phrase "in the area" is consistent with the EPA's longstanding approach to both RACM and RACT (or BACM and BACT for serious areas) being required for emissions sources within the nonattainment area. Given that states typically elect to demonstrate that they meet the RFP requirement through emissions reductions that result from expeditious imposition of RACM/RACT or BACM/BACT emission controls applied to sources within the area, it is logical that the separate RFP requirement should likewise be based upon the expeditious progress towards attainment achieved through those emission controls. The EPA emphasizes that the RFP requirement and the requirements of section 172(c)(6) are separate components of an attainment plan. In those unusual circumstances where a state needs to impose specific additional controls on sources outside the nonattainment area in accordance with section 172(c)(6) to reach attainment, the state is not required to alter the base year emissions inventory for sources within the area or to alter its RFP analysis. As with other emissions reductions from sources outside the area that the state may rely upon, emissions reductions from measures states may impose to meet section 172(c)(6) will be reflected in the modeled attainment demonstration and thus included and taken into account in that fashion. [See sections IV.D.1 and VI.D.2 of the preamble for additional discussion of section 172(c)(6).]

The EPA also considers this interpretation of the RFP requirement to be consistent with the comparable requirements of CAA section 189(d). Specifically, section 189(d) requires that states with nonattainment areas that fail to attain by the applicable attainment date must make a new attainment plan submission in order to achieve emissions reductions of not less than 5 percent of the most recent emissions inventory "for such area." As discussed in Section VII.F of this rule, the EPA interprets the statute to require an area subject to section 189(d) to achieve not less than a 5 percent reduction of the most recent emissions inventory of direct $PM_{2.5}$ or any $PM_{2.5}$ plan precursor "for such area" (meaning from sources located within the nonattainment area). As a result, the EPA's interpretation of "in such area" and "for such area" are consistently applied for these related provisions of the CAA.

As explained in the proposal, the EPA also sees no appropriate legal or policy basis for addressing the geographic area from which emissions reductions for RFP must be achieved for $PM_{2.5}$ differently than is required by CAA section 182 for ozone. Both pollutants typically result from emissions from numerous sources that mix in the atmosphere and can transport great distances. For both pollutants, the CAA provides different tools for states and the EPA to address both the regional and the local contributions to violations of the NAAQS in a given area. With respect to the local contribution, the CAA provides a specific set of requirements (including RFP) designed to assure that states are properly addressing the emissions from sources located within the nonattainment area, whereas other requirements of the CAA are designed to address contributions from greater distances, whether from within the state, from other states, or even internationally. Were EPA to interpret the RFP requirements to authorize states to meet the emissions reductions requirement from sources outside the area, this would be inconsistent with the requirements specifically designed to assure that states get necessary reductions from the local sources that contribute to the violations through the attainment plan.

One commenter recommended a potential statutory interpretation in support of an outside-the-area approach. The EPA appreciates the suggestion, but has determined that it would be too inconsistent with the structure and purpose of the attainment plan requirements of the statute. The commenter specifically suggested that EPA should redefine the term "area" to encompass not just the designated nonattainment area, but also some larger geographic area with sources of emissions that cause or contribute to the ambient air quality; and that reductions from such sources should be allowed to count towards meeting the RFP requirement in addition to reductions from sources in the designated nonattainment area. The EPA considers such an approach inappropriate for several reasons. First, such a reading would be inconsistent with the EPA's longstanding reading of this same term in many important places throughout the statute, including but not limited to explicit statutory references to the "area" in section 107(d)(1) (relevant to designations), section 107(d)(3) (relevant to redesignations), section 110(a)(2)(I) (relevant to the scope of all of the attainment plan requirements imposed by Part D), section 189(B)(2) (relevant to the schedule for submission of attainment plans under subpart 4), and section 189(e) (relevant to the statutory test for regulating precursors in a given "area"). Creating a different and conflicting definition of the word "area" for RFP purposes is not appropriate for common sense reasons, and it would require that the same word to be interpreted in multiple ways. Second, the EPA considers the redefinition of the term "area" inappropriate because it could be perceived as an attempt to alter the meaning of the term as the D.C. Circuit has already interpreted it in the *NRDC* v. *EPA* decision concerning the plain meaning of the term "in the area." Third, to the extent that there are situations in which the boundaries of the nonattainment area are incorrect because they fail to include the sources that contribute violations in an adjacent area to the extreme degree posited by the commenters, the statute already provides a straightforward solution to such a situation through the initial designation and redesignation provisions of section 107(d).

Finally, the EPA acknowledges that in the prior 2007 $PM_{2.5}$ implementation rule, the EPA did adopt a different interpretation of the RFP requirement for the first time that would have authorized states to meet the RFP requirement with emissions reductions from sources outside the nonattainment area within certain narrow parameters for purposes of the 1997 $PM_{2.5}$ NAAQS.[127] The EPA received a petition for reconsideration on this specific issue and granted the petition to reexamine that aspect of the 2007 $PM_{2.5}$ implementation rule.[128] Before the EPA proceeded with that reconsideration, however, the litigation over the 2007 $PM_{2.5}$ implementation rule and the 2008 NSR revisions (addressing the $PM_{2.5}$ NAAQS) proceeded with challenges on other statutory authority issues while the petition for reconsideration was still under evaluation. This litigation resulted in the court's decision in *NRDC* v. *EPA*, 706 F.3d 428 (D.C. Cir. 2013). In that decision, the court remanded the entire 2007 $PM_{2.5}$ implementation rule, including the portions relevant to the RFP requirement, to the EPA for failure to comply with the statutory requirements of subpart 4. This rulemaking constitutes the EPA's response to that judicial remand and through this process the EPA is replacing the 2007 $PM_{2.5}$ implementation rule, including the prior regulatory provisions and guidance related to states meeting the RFP requirements with emissions reductions from outside the designated nonattainment area. Accordingly, upon completion of this rulemaking the EPA will be interpreting the RFP requirement consistent with past practice. The EPA also notes, as a factual matter, that states have not been using this feature of the 2007 $PM_{2.5}$ implementation rule.[129] Aside from the lack of a legal basis for the commenter's preferred approach to RFP, thus far the EPA's interpretation of the requirements has not posed the practical difficulties that the commenter raised.

5. Other RFP Considerations

a. Summary of Proposal. The proposal outlined the statutory requirements and existing guidance for RFP. During this discussion, the following guidance from the Addendum was referenced, "Additionally, the EPA believes that it is appropriate to require early implementation of the most cost-effective control measures . . . while phasing in the more expensive control measures." [130] The proposal also discussed other RFP considerations, including $PM_{2.5}$ nonattainment areas that are shared by more than one state or tribe.

b. Final Rule. The EPA is finalizing that, although early implementation of the most cost-effective control measures is often appropriate, states should consider both cost-effectiveness and pollution reduction effectiveness when developing implementation schedules for their control measures and may implement measures that are more effective at reducing $PM_{2.5}$ earlier to provide greater public health benefits. This increased flexibility enables states to develop a more effective implementation schedules for their control measures while efficiently using their resources.

For a multi-state or multi-jurisdictional nonattainment area, the RFP plans for each state represented in the nonattainment area shall demonstrate RFP on the basis of common multi-state inventories. The states or jurisdictions within which the area is located must provide a coordinated RFP plan. Each state must ensure that the sources within its boundaries comply with enforceable emission levels and other requirements that in combination with the reductions planned in other states within the nonattainment area will provide for attainment as expeditiously as practicable and demonstrate RFP consistent with these regulations. In general, the EPA seeks to ensure that $PM_{2.5}$ nonattainment areas that are shared by more than one state or tribe meet RFP requirements as a whole. States and tribes that share a nonattainment area should therefore consult with one another to develop the RFP analysis and control strategy implementation schedule for the area as a whole. Such states and tribes should work with the EPA region or regions that oversee them to confirm that their collective approach is appropriate for RFP.

The EPA's approach for states to meet the RFP requirement is designed to ensure emissions reductions will yield incremental improvements in air quality on the path to attainment, while being sufficiently flexible to accommodate the range of control strategies necessary to address the complex mixtures of pollutants comprising $PM_{2.5}$ in different areas.

c. Comments and Responses. *Comment:* Some commenters asserted that the EPA should not "require" implementing the most cost-effective measures first since states should have the flexibility to implement the more effective but less cost-effective measure earlier, thus providing earlier and greater public health benefits.

Response: In this final rule, the EPA is providing states with the flexibility to implement measures that are more effective at reducing $PM_{2.5}$ earlier to provide greater public health benefits, but is not requiring it. This increased flexibility is in keeping with the overall requirement of expeditious attainment of the NAAQS.

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[127] See the discussion of this prior approach to RFP in the proposal for this action. 80 FR 15388–89. By its terms, the 2007 $PM_{2.5}$ Implementation Rule applied only to the 1997 $PM_{2.5}$ NAAQS. The EPA's guidance for the 2006 $PM_{2.5}$ NAAQS did not follow this approach with respect to the RFP requirement for purposes of the 2006 $PM_{2.5}$ NAAQS. The EPA later withdrew the guidance for the 2006 $PM_{2.5}$ NAAQS as a result of the court decision in NRDC v. EPA, 706 F.3d 428 (D.C. Cir. 2013).

[128] See, Letter to David S. Baron, EarthJustice, from Gina McCarthy, Assistant Administrator, dated May 13, 2010. A copy of this letter is in the docket for this action.

[129] See, *e.g.*, "Approval and Promulgation of Implementation Plans; California; 2007 South Coast $PM_{2.5}$ Plan and 2007 State Strategy; Proposed Rule," 76 FR 41567, 41577–78 (July 14, 2011); Final Approval of Air Quality Implementation Plans; California; South Coast Attainment Plan for the 1997 $PM_{2.5}$ NAAQS Standards; Final Rule," 76 FR 69928 (November 9, 2011).

[130] *Ibid.* at 42016.

G. Quantitative Milestones

1. General Approach to Quantitative Milestones

a. Summary of the Proposal. The proposal built from the statutory language of 189(c)(1), which requires quantitative milestones that (1) demonstrate RFP, and (2) must be achieved every 3 years until the area is redesignated attainment. The proposal first addressed the issue of the starting date for counting the 3-year periods. For a Moderate area that cannot practicably attain the relevant $PM_{2.5}$ NAAQS within the statutory timeframe for a Moderate area, the EPA proposed that a state must submit two sets of quantitative milestones—the first set to be achieved at year 4.5 from designation and the second set to be achieved at year 7.5 from designation. The EPA also proposed that the quantitative milestones contained in the attainment plan for a Moderate nonattainment area must be constructed such that they can be tracked, quantified and/or measured adequately in order for the state to meet its milestone reporting obligations, which come due 90 days after a given milestone date. The EPA therefore proposed to require that states select the quantitative milestones that are appropriate and quantifiable and that will provide for objective evaluation of progress toward attainment in their Moderate $PM_{2.5}$ nonattainment area, whether the area can practicably attain the $PM_{2.5}$ NAAQS by the statutory attainment date or not. In addition to this general proposed approach for selecting quantitative milestones for a Moderate nonattainment area, the EPA proposed a requirement that, at a minimum, states must include in all attainment plans for Moderate $PM_{2.5}$ nonattainment areas a metric to confirm that all control measures identified and adopted as RACM and RACT for the area have been fully implemented within 4 years of designation.

b. Final Rule. Section 189(c) of the Act explicitly requires that quantitative milestones must be achieved every 3 years, but does not specify the starting date for counting the 3 year periods. In the General Preamble and Addendum, the agency stated that quantitative milestones must be achieved every 3 years starting from the due date for the plan submission (*i.e.,* because the Moderate area attainment plan is due no later than 18 months after designation of the area, the first set of milestones would need to be achieved 4.5 years after the area's designation) until the area is redesignated attainment.[131] The EPA is finalizing this approach for the $PM_{2.5}$ NAAQS. The EPA interprets this requirement to be the most appropriate reading of CAA section 189(c)(1) which requires "quantitative milestones which are to be achieved every 3 years until the area is redesignated attainment." This approach is also consistent with the longstanding approach outlined in the General Preamble.[132] These timeframes for the quantitative milestones apply to all areas designated nonattainment for a $PM_{2.5}$ NAAQS on or after January 15, 2015, including all areas designated nonattainment effective April 15, 2015 for the 2012 $PM_{2.5}$ NAAQS.[133] *See* 40 CFR 51.1013(a).

For all areas designated nonattainment for the 1997 and/or 2006 $PM_{2.5}$ NAAQS before January 15, 2015,[134] the EPA is establishing December 31, 2014 as the starting point for the first 3 year period for quantitative milestones under CAA section 189(c). This is because December 31, 2014, was the due date for states to submit additional SIP elements necessary to satisfy the subpart 4 Moderate area requirements for the 1997 and 2006 $PM_{2.5}$ standards.[135] Establishing December 31, 2014 as the starting point for the first 3 year period under CAA section 189(c) for the 1997 and 2006 $PM_{2.5}$ standards is in keeping with the EPA's historical approach to quantitative milestone dates (*i.e.,* using the due date for the Moderate area plan submission as the starting point for the first 3 year milestone period). Thus, for any area designated nonattainment for the 1997 and/or 2006 $PM_{2.5}$ NAAQS that has not yet attained these NAAQS and therefore continues to have attainment planning obligations for these NAAQS, the state must submit quantitative milestones to be achieved by December 31, 2017 (the first milestone date), at minimum. Additional milestone dates may also apply to such an area depending on the relevant attainment planning period. *See* 40 CFR 51.1013(a)(4).

Regardless of whether or not an attainment plan demonstrates attainment by the statutory attainment date, the EPA requires that all Moderate area $PM_{2.5}$ attainment plans must define appropriate quantitative milestones to be achieved by 4.5 years and 7.5 years following designation of the area. Although it occurs after the Moderate area attainment date, the EPA is requiring Moderate area plans to contain this 7.5 year milestone, even where those plans demonstrate attainment before the milestone would arrive. Where the EPA uses its discretionary authority in CAA section 188(b)(1) to reclassify an area before the Moderate area attainment date applicable to the area, CAA section 189(b)(2) allows the state up to 4 years to submit the required Serious area attainment demonstration and related plan elements, such as quantitative milestones. For example, if the reclassification occurs 4 years after designation, the state may be allowed to submit the Serious area quantitative milestones up to 8 years after designation, well after the second milestone date (7.5 years after designation) has passed. Without the 7.5 year milestone requirement, this circumstance would undermine the purpose of the quantitative milestone requirement, which is to ensure that states will report to EPA on each nonattainment area's progress toward attainment at regular intervals, even following reclassification.[136]

A similar issue would result in the event that a Moderate area that did demonstrate attainment in the original attainment plan fails to attain by the statutory attainment date. In this case, the area would have failed to meet the attainment date which is as expeditiously as practicable but no later than the end of the sixth calendar year after designation as required by CAA section 188(c)(1). Section 188(b)(2) of the Act allows the Administrator up to

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[131] General Preamble, 57 FR 13498 (April 16, 1992), at page 13539.

[132] 57 FR 13539.

[133] 80 FR 2206, January 15, 2015.

[134] The EPA promulgated nonattainment area designations for the 1997 $PM_{2.5}$ NAAQS effective April 2005 (70 FR 944, January 5, 2005 and 70 FR 19844, April 14, 2005). The EPA promulgated nonattainment area designations for the 2006 $PM_{2.5}$ NAAQS effective December 2009 (74 FR 58688, November 13, 2009), March 2011 (76 FR 6056, February 3, 2011), and November 2012 (77 FR 65310, October 26, 2012).

[135] 79 FR 31566 (June 2, 2014) (final rule establishing subpart 4 moderate area classifications and deadline for related SIP submissions) ("Classification and Deadline Rule"). Although the Classification and Deadline Rule did not affect any action that the EPA had previously taken under CAA section 110(k) on a SIP for a $PM_{2.5}$ nonattainment area, the EPA noted that states may need to submit additional SIP elements to fully satisfy the applicable requirements of subpart 4, even for areas with previously approved $PM_{2.5}$ attainment plans, and that the deadline for any such additional plan submissions was December 31, 2014. *Id.* at 31569.

[136] *See, e.g.,* Addendum at 42016, n. 43 (noting that the plain terms of CAA section 189(c) require that milestones be achieved every 3 years until the area is redesignated attainment and, therefore, do not contemplate any breaks in the milestones due to an area's reclassification).

6 months to determine that a Moderate failed to attain and reclassify that area to Serious, which would be at least 6.5 years after designation. As described in Section VI.A.1 of this preamble, the Serious area would have 18 months from reclassification due to a failure to attain (8 years after designation) in order to submit an attainment plan. The EPA has therefore determined that, in order to avoid gaps of greater than 3 years in the implementation of quantitative milestones, all Moderate area attainment plans must contain quantitative milestones to be achieved 4.5 years and 7.5 years after designation and which demonstrate continued progress toward timely attainment of the relevant $PM_{2.5}$ NAAQS. In the event that the area fails to attain, this will provide the EPA with appropriate tools necessary to continue to monitor the area's continued progress toward attainment while the state develops the Serious area attainment plan.

The quantitative milestones contained in the attainment plan for a Moderate nonattainment area should be constructed such that they can be tracked, quantified and/or measured adequately in order for the state to meet its milestone reporting obligations, which come due 90 days after a given milestone date. In the Addendum, the EPA suggested some possible metrics that "support and demonstrate how the overall quantitative milestones identified for an area may be met," such as percent implementation of control strategies, percent compliance with implemented control measures, and adherence to a compliance schedule. This list was not exclusive or exhaustive but reflected the EPA's view that the purpose of the quantitative milestone requirement is to provide an objective way to determine whether the area is making the necessary progress towards attainment by the applicable attainment date.[137] The EPA interprets Section 189(c) of the Act to allow states to identify milestones that are suitable for the specific facts and circumstances of the attainment plan for a particular area, so long as they provide an objective means to measure RFP.

This rule requires that each attainment plan for a Moderate $PM_{2.5}$ nonattainment area contain quantitative milestones that provide for objective evaluation of RFP toward attainment in the $PM_{2.5}$ nonattainment area, whether the plan provides for attainment of the $PM_{2.5}$ NAAQS by the statutory attainment date or demonstrates that attainment by such date is impracticable. For this approach, the EPA does not require that such quantitative milestones take any particular form, merely that they provide a means to evaluate progress (*i.e.,* demonstrate RFP) meaningfully. The EPA will review each attainment plan submission on a case-by-case basis to determine whether the quantitative milestones contained in the plan are specific enough to provide an objective means for evaluating the area's progress toward attainment, consistent with the statutory requirements of CAA section 189(c). The EPA recommends that states confer with their respective EPA regional office to develop appropriate quantitative milestones. *See* 40 CFR 51.1013(a).

The Addendum stated that the Moderate area quantitative milestones "will be met by showing that emissions reductions scheduled to be made between the SIP due date and the attainment date for these moderate areas were actually achieved. Most of these emissions reductions will result from implementation of RACM (including RACT) as part of the moderate area SIP." However, this rule does not specify that quantitative milestones must be expressed in terms of emissions reductions. The EPA recognizes that it is impractical to expect that a state will always be able to quantify and compare real and projected emissions reductions, and submit a report to the EPA within 90 days of a given milestone as required under CAA section 189(c)(2). Therefore, the final rule requires that, at a minimum, states must include in all attainment plans for Moderate $PM_{2.5}$ nonattainment areas a milestone that all control measures identified and adopted as RACM and RACT for the area have been fully implemented within 4 years of designation. This milestone specifically derives from section 189(a)(1)(C) of the Act, that applies to all Moderate areas and thus represents a milestone that all Moderate areas must meet regardless of whether it is listed explicitly as an individual milestone. *See* 40 CFR 51.1013(a)(1)(iii).

For an area that submitted air quality targets with the RFP plan under the optional provision that was described in Section IV.F of this preamble, an air quality based milestone (*i.e.,* one that is expressed in terms of an ambient $PM_{2.5}$ level) is strongly recommended to be included in order to confirm that the air quality target has been met for the quantitative milestone year. If used, this milestone will be compared to the most recently certified monitored ambient air data as part of the milestone report due after the area reaches each quantitative milestone date. The EPA recognizes that certified monitored ambient air data are not available for some period after a calendar year ends. As a result, the EPA expects that this quantitative milestone may sometimes be satisfied with data that are over a year old. For example, for Moderate areas having an effective date of designations in April 2015, the first quantitative milestone date will be in October 2019 (3 years after the 18 month SIP due date), and the associated report will be due 90 days later, in January 2020. In this example, the state would likely have to rely upon certified air quality data for 2018 because data for the 2019 calendar year would not yet be fully certified. Additionally, this milestone should normally be reported in the same form as the applicable $PM_{2.5}$ NAAQS. However, the EPA expects that in some circumstances, it may be appropriate to use annual averages instead of the 3 year average to help justify variations due to meteorological occurrences.

c. Comments and Responses.

Comment: Some commenters stated the Act may be read to conclude that the requirement to include any quantitative milestones in a Moderate area plan does not apply to a plan demonstrating the impracticability of attaining the NAAQS by the attainment date.

Response: The EPA's longstanding interpretation of CAA section 189(c) as a requirement that applies to all PM_{10} nonattainment area plans, including those demonstrating that attainment by the applicable attainment date is impracticable, is consistent with the purpose and structure of subpart 4. The design of the CAA for PM nonattainment areas combines the requirements of subpart 1 and subpart 4 to support expeditious attainment of the applicable NAAQS. RFP is the prescribed tool available to a state to plan their emission reduction progress toward expeditious attainment. Quantitative milestones are a critical aspect of the CAA and the attainment plan in order for the EPA to monitor the area's RFP toward expeditious attainment and trigger the appropriate response if RFP is not maintained. The EPA thus determined that allowing an area to simply not submit any quantitative milestones would not afford the EPA the necessary tools to monitor RFP toward expeditious attainment.

2. Milestone Report Submission

a. Summary of the Proposal. Because the statute does not define the parameters of quantitative milestone demonstrations, the EPA has discretion to determine the components of the required demonstration and the form and manner for submission. The proposal took comment on options for doing this. The EPA proposed to require that the milestone report submission must include the following four components: (i) A certification by the Governor or Governor's designee that the state's attainment plan control strategy is being implemented as described in the applicable attainment plan, (ii) technical support sufficient to document completion statistics for appropriate milestones and to demonstrate that the quantitative milestones have been satisfied and how the emissions reductions achieved to date compare to those required or scheduled to meet RFP, (iii) as applicable, an air quality screening analysis to determine if measured air quality progress is consistent with the expected air quality improvement target correlated with the RFP emissions reductions for the previous 3 year period, and (iv) an evaluation of whether the $PM_{2.5}$ NAAQS will be attained by the projected attainment date for the area. In addition, the EPA proposed that the milestone report must include a description and schedule for any remedial actions the state has taken or will take to address any failure to meet a quantitative milestone, including the implementation status of contingency measures for failing to meet RFP in the area.

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[137] Addendum to the General Preamble, 59 FR 41998 (August 16, 1994), at page 42016.

The EPA also sought comment on how electronic reporting could facilitate a state's submission of the required milestone report, how it could accommodate the various narrative and data-dependent components that the EPA proposed be part of such a submission, and what particular system features might be desirable to accommodate milestone report submissions through the eSIP system.

b. Final Rule. The final rule, mirroring section 189(c)(2) of the Act, requires that each state containing a $PM_{2.5}$ nonattainment area submit to EPA, within 90 days after each milestone date applicable to the area, a demonstration that all measures in the approved plan (including the RFP plan) for the area have been implemented and that the milestone has been met. This rule outlines the content required by the EPA for the quantitative milestone report. The EPA must then determine whether or not a state's demonstration is adequate within 90 days after receiving a demonstration which contains the required information and analysis. The EPA intends to promptly inform the relevant state of any determination that the state has failed to submit a timely quantitative milestone report and any determination that a submitted milestone report is not adequate.

The EPA will work with a state to assist them in meeting the reporting deadline, and expects that, because the report is to be fairly low burden and may be submitted electronically through eSIP, in most cases the state will submit it on time, especially if they have implemented the programs required to meet their milestones. If, however, a state fails to submit a milestone demonstration report by the due date or the EPA determines that a milestone was not met, the final rule requires the state to submit a SIP revision within 9 months of either the missed reporting deadline or the EPA's determination of the state's failure to meet a milestone. According to the statutory requirements of CAA section 189(c)(3), the new SIP revision must assure "that the State will achieve the next milestone (or attain the national ambient air quality standard . . . , if there is no next milestone) by the applicable date." If a state fails to make a SIP submission to correct a failure to meet RFP expeditiously, sanctions under CAA sections 110(m) and 179(b) may apply. If a state is unable to correct a failure to meet RFP, this may be evidence that the state cannot practicably attain the NAAQS by the applicable attainment date and may serve as a basis for reclassification of the area to Serious under CAA section 188(b)(1).

As previously noted, the EPA has offered guidance about what the milestone report should contain. The Addendum says, "This report must contain technical support sufficient to document completion statistics for appropriate milestones. For example, the demonstration should graphically display RFP over the course of the relevant 3 years and indicate how the emissions reductions achieved to date compare to those required or scheduled to meet RFP and the required [quantitative] milestones. The calculations (and any assumptions made) necessary to determine the emissions reductions to date should also be submitted. The demonstration should also contain an evaluation of whether the PM_{10} NAAQS will be attained by the projected attainment date."[138] This guidance is still appropriate for states demonstrating compliance with RFP and quantitative milestones for $PM_{2.5}$ NAAQS. The EPA requires that the milestone report submission must include the following components. *See* 40 CFR 51.1013(b).

First, the report must include a certification by the Governor or Governor's designee that the SIP control strategy is being implemented consistent with the RFP plan, as described in the applicable attainment plan. Second, the report must contain technical support, including calculations, sufficient to document completion statistics for each quantitative milestone and to demonstrate that the quantitative milestones have been satisfied and how the emissions reductions achieved to date compare to those required or scheduled to meet RFP. Additionally, the report must include a discussion of whether the $PM_{2.5}$ NAAQS will be attained by the projected attainment date for the area. *See* 40 CFR 51.1013(b). The EPA decided not to finalize the proposed requirements to include an air quality screening analysis or the description and schedule for remedial actions taken by the state to address a failure to meet a quantitative milestone. This decision was made because the remaining components of the quantitative milestone report are sufficient to enable the EPA to assess whether the nonattainment area is meeting RFP.

As stated in the Addendum, the milestone report must be submitted from the Governor or Governor's designee to the Regional Administrator of the respective EPA Regional Office serving the submitting state. The EPA will notify the state of its determination (regarding whether or not the state's report is adequate) by sending a letter to the appropriate Governor or Governor's designee. The EPA encourages states to submit milestone reports, including supporting documents, through the agency's electronic SIP (eSIP) submission system in order to simplify the process and reduce resource burden on all sides.

c. Comments and Responses.

Comment: Some commenters did not support the proposal and stated that requiring this level of documentation is unnecessary and puts an excessive workload burden on states and local agencies.

Response: The EPA recognizes that there is some level of resources required to address the requirements prescribed by every rule. However, the EPA concluded that the benefit offered to the public by reviewing quantitative milestone reports while assessing whether nonattainment areas are making reasonable further progress toward attaining the $PM_{2.5}$ NAAQS and the associated public health benefits outweigh the anticipated workload burden for states.

Comment: Some commenters stated that the first two components of the quantitative milestone report described in the proposal are sufficient to comply with the requirements of CAA section 189(c)(2). The commenters stated that the proposed air quality screening analysis is not supported by the statute and is unnecessary if the second component is fulfilled. The commenters stated that the proposed description and schedule for remedial actions the state has taken or will take to address any failure to meet a quantitative milestone is more than what is necessary to demonstrate compliance with RFP milestones and could require revisions to the SIP.

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[138] *Ibid.* at 42017.

Response: After considering these comments and in an effort to simplify the rule, the EPA decided to eliminate the two proposed requirements for the quantitative milestone report as suggested by these commenters. As stated earlier, this decision was made because the EPA determined that the remaining components of the quantitative milestone report are sufficient to enable the EPA to assess whether the nonattainment area is meeting RFP.

Comment: One commenter stated that, while they would not object to filing periodic reports, as part of their milestone report, the EPA should not insist on the state actually inspecting all covered facilities and indicating that RACT or RACM has not been implemented if a small subset of facilities is found in violation.

Response: It is not the intent of the EPA to require states to physically inspect all covered sources to verify the implementation of required control measures. The intent is that, at the time of the milestone due date, all covered sources would be legally required to have implemented required control measures and the state has reasonably been assured that this occurred.

H. Contingency Measures

1. Summary of the Proposal

The Act requires Moderate $PM_{2.5}$ nonattainment area plans to contain contingency measures consistent with CAA section 172(c)(9). Contingency measures are additional control measures to be implemented in the event that the EPA determines that an area failed to meet RFP requirements (including associated quantitative milestones) or failed to attain the $PM_{2.5}$ primary standard by the applicable attainment date. These measures must be fully adopted rules or control measures that are ready to be implemented quickly upon failure to meet RFP or failure of the area to meet the standard by its attainment date, and such measures are required to take effect without further action by the state or the EPA. The EPA proposed and sought comment on general requirements for contingency measures for Moderate $PM_{2.5}$ nonattainment areas. The EPA has longstanding interpretations of the statute with respect to the contingency measure requirement, both for PM and for other pollutants, in the General Preamble and Addendum. These documents provide guidance and recommendations for states to follow in submitting contingency measures, and the proposal did not contain any significant changes to the existing guidance and recommendations. However, the EPA sought comment on whether the guidance needed to be revised or expanded. Additionally, as discussed in the proposal, the EPA believes that the DC Circuit's decision in *NRDC* v. *EPA* does not affect the overall contingency measure requirements that were finalized in the remanded 2007 $PM_{2.5}$ Implementation Rule. The EPA determined this because CAA section 172(c)(9) imposes the contingency measure requirement for attainment plans for the $PM_{2.5}$ NAAQS and it is not superseded or subsumed by any specific contingency measure requirements under subpart 4. As a result, the proposal for this rule remained very similar to the final 2007 $PM_{2.5}$ Implementation Rule.

2. Final Rule

Consistent with the proposal, the final rule codifies existing policies on contingency measures, but does not make significant changes to these policies. Although CAA section 172(c)(9) requires contingency measures, the provision does not specify exactly what parameters such measures must meet. The EPA is finalizing an approach to contingency measures for the $PM_{2.5}$ NAAQS that is similar to the approach recommended in earlier EPA guidance. Specifically, in order for contingency measures to be approvable as part of a state's Moderate area attainment plan submission for the $PM_{2.5}$ NAAQS, the state plan must meet the following general requirements (*See* 40 CFR 51.1014):

(1) Contingency measures must be fully adopted rules or control measures that are ready to be implemented quickly upon a determination by the Administrator of the nonattainment area's failure to meet RFP, failure to meet any quantitative milestone, failure to submit a quantitative milestone report or failure to attain the standard by the applicable attainment date.

(2) The state's attainment plan submission must contain trigger mechanisms for the contingency measures, specify a schedule for implementation, and indicate that the measures will be implemented with minimal further action by the state or by the EPA.

(3) The contingency measures shall consist of control measures that are not otherwise included in the control strategy or that achieve emissions reductions not otherwise relied upon in the control strategy for the area.

(4) Contingency measures should provide for emissions reductions approximately equivalent to 1 year's worth of reductions needed for RFP, based on the overall level of reductions needed to demonstrate attainment divided by the number of years from the base year to the attainment year, or approximately equivalent to 1 year's worth of air quality improvement or emissions reductions proportional to the overall amount of air quality improvement or emissions reductions to be achieved by the area's attainment plan.

Regarding the first two points, consistent with prior guidance, states must show that their contingency measures can be implemented with minimal further action on their part and with no additional rulemaking actions such as public hearings or legislative review. After the EPA determines that a moderate $PM_{2.5}$ nonattainment area has failed to meet an RFP requirement or to attain the $PM_{2.5}$ NAAQS, the EPA generally expects all actions needed to effect full implementation of the contingency measures to occur within 60 days after the EPA notifies the state of the area's failure. The EPA intends to notify the state of a failure to meet RFP or to attain the NAAQS by publication of its determination in the **Federal Register**. The state should ensure that the contingency measures are fully implemented as expeditiously as practicable after such notice.[139]

Regarding the third point, the EPA interprets the contingency measure requirement of CAA section 172(c)(9) to require control measures that are not otherwise included in the control strategy or that achieve emissions reductions not otherwise relied upon in the control strategy for the area. However, suitable contingency measures may be measures that were technologically and economically feasible for the area, but did not qualify as RACM or RACT or additional reasonable measures for one or more reasons. For example, a candidate contingency measure may have been deemed technologically and economically feasible, but it was not needed to achieve expeditious attainment in a Moderate area for which the state could demonstrate attainment by the statutory attainment date and therefore was not included as part of the attainment demonstration for the area. It is important that states make decisions concerning contingency measures in conjunction with their determination of the overall control strategy for bringing the area into expeditious attainment, and that states first must identify those control measures needed in order to demonstrate expeditious attainment of the standards; any remaining measures should then be considered as candidates for contingency measures.

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[139] *Ibid.* at 42015.

As discussed in Section IV.D of this preamble, the RACM/RACT provisions in this rule require that, for Moderate areas that cannot practicably attain the NAAQS by the statutory attainment date, states must implement all control measures that they determine to be reasonable (*i.e.,* all technologically and economically feasible measures) for sources in the area. In such cases, the contingency measures for such nonattainment areas would necessarily exceed the criteria for determining whether a measure is reasonable for purposes of RACM/RACT and additional reasonable measures. For example, contingency measures could consist of reasonable controls on sources outside the nonattainment area, early implementation of BACM/BACT on select sources inside the area, other measures identified by the state, or a combination thereof, that collectively provide approximately equivalent to 1 year's worth of emissions reductions/air quality improvement. Such contingency measures would only be triggered in the event the area fails to meet RFP; the EPA does not interpret the requirement for contingency measures for failing to attain the NAAQS by the applicable attainment date to apply to a Moderate area that a state demonstrates cannot practicably attain the NAAQS by the statutory attainment date. Rather, the EPA believes it is appropriate for the state to identify and adopt these measures in a timely way as part of the Serious area attainment plan that it will develop once the EPA reclassifies such an area. However, if a Moderate area that cannot practicably attain the NAAQS fails to meet RFP when reviewed as part of the quantitative milestone either 4.5 or 7.5 years after designation, the requirement to implement contingency measures would be triggered as required by CAA section 172(c)(9). For any Moderate $PM_{2.5}$ nonattainment area, contingency measures can include measures that achieve emissions reductions on sources located outside the nonattainment area as well as from sources within the nonattainment area, provided that the measures offer reasonable assurance that the appropriate air quality impact will result within the nonattainment area.

The final rule continues to allow states to rely on federal measures (*e.g.* federal mobile source measures based on the incremental turnover of the motor vehicle fleet each year) and local measures already scheduled for implementation that provide emissions reductions in excess of those needed to provide for RFP or expeditious attainment. The key is that the statute requires that contingency measures provide for additional emissions reductions that are not relied on for RFP or attainment and that are not included in the RFP or attainment demonstrations as meeting part or all of the contingency measure requirements. The purpose is "to provide a cushion while the plan is being revised to meet the missed milestone." Nothing in the statute precludes a State from implementing such measures before they are triggered. Additionally, the EPA determined that the court ruling upholding contingency measures that were previously required and implemented where they were in excess of the attainment demonstration and RFP for ozone attainment plans necessitates similar treatment for $PM_{2.5}$ NAAQS.[140] The EPA has approved numerous SIPs under this interpretation, *i.e.,* SIPs that use as contingency measures one or more federal or local measures that are in place and provide reductions that are in excess of the reductions required by the attainment demonstration or RFP plan.[141]

For these reasons, the EPA concluded that this approach is reasonable for Moderate $PM_{2.5}$ nonattainment areas that can demonstrate attainment by the statutory attainment date, as the state would calculate the emissions reductions needed for RFP separately from the control strategy determination for such an area. However, crediting an area for "excess" emissions reductions to satisfy the contingency measure requirement is not allowable for Moderate areas that cannot practicably attain by the statutory attainment date. Under the EPA's approach for calculating RFP for such areas, RFP would be calculated directly from the projected emissions reductions from all control measures identified for the area (as RACM and RACT or additional reasonable measures), such that there should be no difference between emissions reductions estimated from control measures and those estimated for demonstrating RFP.

Finally, consistent with the EPA's past approach for contingency measures for $PM_{2.5}$ nonattainment areas, the EPA expects that the emissions reductions from contingency measures should be approximately equivalent to 1 year's worth of emissions reductions while the state is revising its attainment plan for the area. States should explain the amount of anticipated emissions reductions to be accomplished by the contingency measures outlined in the plan. In the rare event that an area is unable to identify contingency measures to account for approximately 1 year's worth of emissions reductions, the state should provide a reasoned justification why the smaller amount of emissions reductions is appropriate. As described in Section IV.F of this preamble, the EPA requires an approach for interpreting the statutory RFP requirement that would require demonstrating RFP based on reductions from sources located inside the nonattainment area. Keeping with the historic linkage between RFP and contingency measures, the EPA is also finalizing a similar approach for calculating 1 year's worth of emissions reductions for purposes of adopting appropriate contingency measures. That is, the EPA's approach for determining the *level* of emissions reductions for contingency measure purposes is to calculate the annual reductions in emissions of direct $PM_{2.5}$ and $PM_{2.5}$ plan precursors needed from sources located inside the nonattainment area. As explained earlier, however, some or all of the contingency measures reductions can come from outside the area if they are demonstrated to produce the appropriate air quality impact within the nonattainment area.

This rule requires that states must implement contingency measures after the EPA determines that the area has either failed to meet RFP requirements, failed to meet any quantitative milestone, failed to submit a quantitative milestone report, or failed to attain the standards by the applicable attainment date. The purpose of the contingency measure provision is to ensure that corrective measures are put in place automatically at the time that the EPA makes its determination that an area has either failed to meet RFP or failed to meet the standard by its attainment date. The EPA is required to determine within 90 days after receiving a state's quantitative milestone demonstration, and within 6 months after the attainment date for an area, whether these requirements have been met. The additional consequences for states with areas that fail to attain the NAAQS or to meet RFP are described in section 179(d) of the CAA and discussed in Section V of this preamble.

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[140] *See LEAN* v. *EPA,* 382 F.3d 575 (5th Cir., 2004).

[141] *See,* e.g., 62 FR 15844 (April 3, 1997); 62 FR 66279 (December 18, 1997); 66 FR 30811 (June 8, 2001); 66 FR 586 and 66 FR 634 (January 3, 2001); 78 FR 64402 (October 29, 2013).

See Section IV.A of this preamble for a discussion of the due dates for submission of contingency measures and other attainment plan elements.

3. Comments and Responses

Comment: Commenters stated that requiring contingency measures in areas with mature air pollution control programs is very challenging because they already have developed aggressive control measures to meet CAA requirements and support expeditious attainment. Commenters asserted that it would be extremely difficult to develop further control measures to meet any contingency measure requirements. Commenters objected to the proposed requirement that contingency measures must be approximately equivalent to 1 year's worth of emissions reductions because it is a departure from existing guidance which states the contingency emissions reductions "should be" approximately equal and because sometimes identifying control measures for this level of reductions is just not possible. Commenters advocated that EPA should provide a more reasonable approach to the contingency measure requirement, but did not provide specific recommendations. Other commenters stated that contingency measures should provide 1 year's worth of emissions reductions needed for RFP.

Response: The EPA acknowledges that states containing areas with more longstanding and pervasive nonattainment problems may already have implemented many control measures for purposes of attaining the NAAQS, and there may be fewer sources and measures available to meet the contingency measure requirements of the statute. However, the EPA notes that section 172(c)(9) of the CAA explicitly requires states to adopt contingency measures to apply in the event of failure to meet RFP or failure to attain the NAAQS as a required component of all attainment plans. Typically, contingency measures will be comprised of measures that a state and the EPA have determined are not required to meet RACM/RACT or other requirements, *e.g.,* on the grounds that they are more technologically or economically challenging. As a result, such measures may not be required as RACM/RACT, but are nevertheless available for use as contingency measures. Another approach to contingency measures, if appropriate, would be to rely on control measures imposed on sources outside the boundaries of the designated nonattainment area. Such contingency measures require adequate support to establish that the reductions would have the intended impacts within the nonattainment area, but can be a source of additional measures for this purpose.

Finally, the EPA notes that its longstanding guidance is that contingency measures should provide approximately 1 year's worth of RFP, but this amount may vary based upon appropriate facts and circumstances of each unique nonattainment area. As discussed, states should explain the amount of anticipated emissions reductions to be accomplished by the contingency measures outlined in the plan. In the rare event that an area is unable to identify contingency measures to account for approximately 1 year's worth of emissions reductions, the state should provide a reasoned justification why the smaller amount of emissions reductions is appropriate.

Comment: Commenters stated that "excess" emissions reductions (*i.e.,* emission reduction measures that are included in a modeled attainment demonstration indicating that the area will improve air quality to well below the standard) should not be used as contingency measures in the event an area actually fails to attain. Commenters asserted that the failure to attain should be considered a demonstration that excess emissions reductions do not exist. Further, the commenters stated that excess reductions do not provide the public health benefit intended by Congress. Other commenters stated that Moderate areas that cannot attain by the statutory attainment date could also have excess emissions reductions creditable as contingency measures.

Response: In keeping with longstanding practice, the final rule allows excess emissions reductions to be credited as contingency measures in plans that demonstrate attainment but not for plans that demonstrate an impracticability to attain. This allows nonattainment areas to credit emissions reductions beyond those planned to satisfy attainment plan requirements as meeting part or all of the contingency measure requirements. This allowance is further supported by the court's ruling in *LEAN* v. *EPA,* which found that emissions reductions in excess of what were needed for the attainment demonstration and RFP in ozone attainment plans are creditable for contingency measures. Because the contingency measures requirement for both ozone and $PM_{2.5}$ originates in CAA section 172(c)(9), it is applicable for all areas designated nonattainment for any NAAQS. Therefore, the EPA concluded that the same approach is appropriate for Moderate $PM_{2.5}$ nonattainment areas that can demonstrate attainment by the statutory attainment date. Allowing "excess" emissions reductions affords proper credit for these areas as they continue to make progress toward attainment while the new SIP is developed for the area. Additionally, in support of the overarching goal of the CAA, public health will benefit from the excess emissions reductions. However, such an allowance for a Moderate area that cannot practicably attain is not acceptable because all emissions reductions anticipated from control measures while developing the attainment plan should be accounted for in the RFP plan. With all of these reductions accounted for in the RFP plan, there are no excess reductions beyond the attainment planning period to be credited as contingency measures.

I. Attainment Dates

1. Summary of Proposal

The proposal described the CAA section 188(c)(1) requirement for Moderate areas to attain the standard as expeditiously as practicable, but no later than the end of the sixth calendar year after the "area's designation as nonattainment." For purposes of clarity, the EPA proposed to interpret the term "area's designation" as meaning "the area's effective date of designation," consistent with the agency's past approach for implementing the 1997 and 2006 $PM_{2.5}$ NAAQS, and with its approach for implementing the NAAQS for other criteria pollutants under part D, title I of the CAA. The EPA requested comment on this interpretation. The preamble to the proposal also described the process for determining whether an area has attained the NAAQS.

2. Final Rule

The final rule maintains the requirement interpreting of CAA section 188(c)(1) to mean that the attainment date must be as expeditiously as practicable, but no later than the end of the sixth calendar after the *effective date* of an area's designation. *See* 51.1004(a)(1). Thus, as an example, for areas designated nonattainment in the first round of designations for the 2012 $PM_{2.5}$ NAAQS, the effective date of designation is April 15, 2015, and the Moderate area attainment date would be as expeditious as practicable, but no later than December 31, 2021 (*i.e.*, the end of the sixth calendar year after designation). Serious area attainment dates are discussed fully in Section VI.I of this preamble.

The EPA's approach to approving an attainment date for a $PM_{2.5}$ nonattainment area will be different for a Moderate area that cannot practicably attain the relevant $PM_{2.5}$ NAAQS by the end of the sixth calendar year after designation. Given that the agency will reclassify any such area to Serious and thereby trigger additional Serious area requirements for the area, the EPA will approve an attainment date for the area when it takes action on the Serious area attainment plan submitted for the area. In the interim, before the EPA takes action to reclassify the area, the statutory Moderate area attainment date will continue to apply to such an area. *See* 40 CFR 51.1000 and 51.1004(a)(1)(ii). As discussed more fully in Section VI.I of this preamble, when the EPA reclassifies the area, then the presumptive attainment date for the area will be as expeditious as practicable, but no later than the end of the tenth calendar year following designation.

Once an area has an approved attainment date and has implemented its plan, the EPA has the responsibility for determining whether the nonattainment area has attained the standard by its applicable attainment date. Section 179(c)(1) of the CAA requires the EPA to make determinations of attainment no later than 6 months following the attainment date for the area. Under CAA section 179(c)(2), the EPA must publish a notice in the **Federal Register** identifying those areas that failed to attain by the applicable attainment date. The statute further provides that the EPA may revise or supplement its determination of attainment for the affected areas based upon more complete information or analysis concerning the air quality for the area as of the area's attainment date.

Section 179(c)(1) of the CAA provides that the EPA is to base the attainment determination for an area upon an area's "air quality data as of the attainment date." The EPA will make the determination of whether an area's air quality is meeting the $PM_{2.5}$ NAAQS by the applicable attainment date based upon data gathered from the air quality monitoring sites that have been entered into the EPA's Air Quality System (AQS) database. The state is not required to make any special or additional submission in order for EPA to make a determination of attainment.

A Moderate $PM_{2.5}$ nonattainment area's air quality status is determined in accordance with Appendix N of 40 CFR part 50. To show attainment of the current 24-hour and annual standards for $PM_{2.5}$, data from the most recent 3 consecutive years prior to the area's attainment date must show that $PM_{2.5}$ concentrations over the prior 3 year period are at or below the levels of the standards. A complete year of air quality data, as described in part 50, Appendix N, is comprised of all 4 calendar quarters with each quarter containing data from at least 75 percent of the scheduled sampling days.

The EPA will begin processing and analyzing data related to the attainment of Moderate $PM_{2.5}$ nonattainment areas after the applicable attainment date for the affected areas. Current EPA regulations, under 40 CFR part 58, set the deadline for the state to submit air quality data into the AQS database as no later than 90 days after the end of the calendar year.

While the EPA may determine that an area's air quality data indicate that an area may be meeting the $PM_{2.5}$ NAAQS for a specified period of time, this does not eliminate the state's responsibility under the Act to adopt and implement an approvable attainment plan unless the area also has been granted a clean data determination. If the EPA determines that an area has attained the standard as of its attainment date, the area will remain designated as nonattainment until the state has submitted an acceptable redesignation request and maintenance plan, and EPA has approved them.

In order for an area to be redesignated as attainment, the state must comply with the five requirements listed under section 107(d)(3)(E) of the CAA. Briefly, this section requires that:

(1) The EPA has determined that the area has attained the $PM_{2.5}$ NAAQS;

(2) The EPA has fully approved the applicable state implementation plan;

(3) The improvement in air quality is due to permanent and enforceable reductions in emissions;

(4) The EPA has fully approved a maintenance plan for the area; and

(5) The state(s) containing the area or portions of the area have met all applicable requirements under CAA section 110 and part D.[142]

J. Attainment Date Extensions

1. Attainment Date Extension Criteria

a. Summary of Proposal. Subpart 4 of title I of the CAA provides the EPA with authority to grant up to two 1-year extensions of the attainment date for a Moderate area that otherwise could be found to have failed to attain the relevant $PM_{2.5}$ NAAQS, if the area can meet specific statutory criteria related to monitored air quality in the area and the implementation of measures in the attainment plan. Under CAA section 188(d), a state may apply to the EPA for an extension of a Moderate area's attainment date of 1 additional year (the "Extension Year") if "(1) the state has complied with all requirements and commitments pertaining to the area in the applicable implementation plan; and (2) no more than one exceedance of the 24-hour [NAAQS] level for PM_{10} has occurred in the area in the year preceding the Extension Year, and the annual mean concentration of PM_{10} in the area for such year is less than or equal to the standard level." Section 188(d) of the CAA also provides for the possibility that the EPA may grant a second 1-year extension if the Moderate area meets specific criteria. The proposal took comment on two ambiguous aspects of this language that warrant further interpretation through this rule.

First, the proposal addressed the statutory language explicitly setting ambient air quality conditions for an attainment date extension in terms that relate factually to the 24-hour PM_{10} NAAQS that was in effect at the time of the 1990 Amendments of the CAA, which has a statistical form that is substantially different from the 24-hour $PM_{2.5}$ NAAQS. The requirement in CAA section 188(d)(2) states that an extension may be granted if "no more than one exceedance of the 24-hour national ambient air quality standard level for PM_{10} has occurred in the area in the year preceding the Extension Year, and the annual mean concentration of PM_{10} in the area for such year is less than or equal to the standard level." The proposal noted that the form of the 2006 24-hour $PM_{2.5}$ NAAQS is a percentile-based form and not a "one expected exceedance" form as is the PM_{10} NAAQS, and therefore the statutory language requires some interpretation with regard to how it applies to the $PM_{2.5}$ NAAQS.

The EPA included a proposed option and requested comment on two other alternatives. The preferred proposed approach would only require a state to demonstrate that in the year prior to the applicable attainment date for the area, a Moderate area did not exceed the level of (*i.e.*, had clean data for) the specific $PM_{2.5}$ NAAQS for which the area is designated nonattainment (the "applicable NAAQS") and for which the state is seeking the extension of the attainment date. The second approach would require that a state demonstrate that in the year prior to the applicable attainment date for an area, the Moderate area did not exceed the level of the specific $PM_{2.5}$ NAAQS for which the area is designated nonattainment (the applicable NAAQS), and did not exceed the most stringent level of any other $PM_{2.5}$ NAAQS in effect nationally at the time the area was designated for the applicable NAAQS. The third approach would require that a state demonstrate that in the year prior to the applicable attainment date for an area, the Moderate area did not have more than one exceedance of the level of the 24-hour $PM_{2.5}$ standard, and that the annual mean concentration of $PM_{2.5}$ in the area for the attainment year was less than or equal to the annual standard, regardless of the NAAQS for which the state is seeking an attainment date extension.

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[142] *See* "Procedures for Processing Requests to Redesignate Areas to Attainment," Memorandum from John Calcagni, USEPA Office of Air Quality Planning and Standards, Director, Air Quality Management Division, September 4, 1992.

Second, the proposal addressed how the language of CAA section 188(d)(2) should apply to the $PM_{2.5}$ NAAQS to the extent that it does not specify whether the air quality criteria for an attainment date extension apply equally for a Moderate area designated nonattainment for both the 24-hour and annual standards, or for just one of the standards. In practice, most areas designated nonattainment for the PM_{10} NAAQS following passage of the 1990 CAA Amendments were designated nonattainment only for the 24-hour PM_{10} NAAQS, with a few designated for only the annual PM_{10} NAAQS or for both the 24-hour and the annual PM_{10} NAAQS. The 24-hour NAAQS has served as the "controlling" (*i.e.,* functionally more stringent) PM_{10} standard, such that the agency's experience to date in granting PM_{10} Moderate area attainment date extension requests has been limited to extending the attainment date for the 24-hour PM_{10} NAAQS.[143] The situation is distinctly different for $PM_{2.5}$ nonattainment areas, as the specific facts and circumstances of a particular area may warrant a nonattainment designation for either the 24-hour standard or the annual standard, but often not both. In most cases, for instance, the current nonattainment areas for $PM_{2.5}$ are designated either for the 1997 annual NAAQS or for the 2006 24-hour NAAQS, but not both.[144] For example, the EPA recently promulgated designations for areas violating only the annual $PM_{2.5}$ NAAQS revised in 2012, not the 24-hour NAAQS, which was retained at the level established during the 2006 p.m. NAAQS review. If a $PM_{2.5}$ nonattainment area is designated only for the 24-hour or only for the annual $PM_{2.5}$ NAAQS, this situation raises the question of how CAA section 188(d)(2) air quality criteria for both standards should apply to such a $PM_{2.5}$ NAAQS nonattainment area if the state seeks an extension of the applicable attainment date for such area.

Regarding the "requirements and commitments" criterion, the EPA proposed to interpret this provision to mean that the state has adopted and is implementing the control measures in the SIP submission it made to address the attainment plan requirements for the applicable $PM_{2.5}$ NAAQS. The proposal also described a second potential interpretation, in which the state would not be eligible for an attainment date extension unless it has adopted and submitted its Moderate area SIP *and* has received full approval from the EPA.

b. Final Rule. The EPA received a number of comments on the attainment date extension criteria. With respect to the criterion requiring compliance with all requirements and commitments in the applicable implementation plan, several commenters agreed with the EPA's proposed approach that the state must have adopted and submitted its Moderate area SIP but does not need to have full approval of the plan by the EPA in order to receive an extension. These commenters indicated that a state should not be penalized for a failure by the EPA to take timely action on the implementation plan. Some commenters opposed the proposed approach, stating that an area's attainment date is not predetermined as the end of the sixth calendar year after designation, but instead is to be "as expeditiously as practicable," and no later than the end of the sixth calendar year. For this reason, the commenters stated that the actual attainment date to be extended would not be known until after approval of the SIP by the EPA.

After considering the comments received on this issue, the EPA is finalizing an approach similar to the preferred option in the proposal. This interpretation is based on the plain language of CAA section 188(d) that does not explicitly require that the state comply with all requirements pertaining to the area in the CAA, but merely requires that the state comply with all requirements in the applicable SIP.[145] In other words, the EPA believes that CAA section 188(d)(1) should be interpreted to mean that so long as the state has submitted the necessary attainment plan for the area for the applicable $PM_{2.5}$ NAAQs and is implementing the control measures in the submission, the fact that the EPA has not yet acted on such submission to make it an approved part of the applicable SIP should not be a barrier to the state obtaining an extension of the attainment date under CAA section 188(d)(1). *See* section 51.1005(a)(1) of the CAA. For the same reason, the EPA also proposes to read this provision not to bar an extension if all or part of an area's Moderate area plan is disapproved or has been promulgated by the EPA as a FIP. In the case that the "applicable implementation plan" is a FIP (or combination of SIP and FIP), then the EPA requires the state to have implemented the control measures contained therein in order to meet the statutory criteria at CAA section 188(d)(1) for a Moderate area attainment date extension.

With respect to the air quality criterion, several commenters supported the EPA's preferred option because it would require an area to show clean data only for the specific standard for which it is seeking an extension year. Some commenters acknowledged that a literal reading of the statute may seem to require a showing of clean data for both the annual and 24-hour $PM_{2.5}$ standards in order to receive an extension, but suggested that this interpretation would not make sense under the circumstance where the two standards have different attainment dates. The commenter believed it would lead to absurd results if, in order to receive an extension for one standard, an area were required to show clean data for the other standard for which the attainment date had not yet passed. On the other hand, other commenters favored the option that would require clean data for both standards in order to obtain an extension for one standard because they believed that only requiring clean data for one standard would allow the area to avoid or delay achieving additional emissions reductions.

After considering the comments on the air quality criterion, the EPA has decided to finalize the approach that would require an area to show clean data during the attainment year only for the specific standard for which it is seeking an extension. *See* 40 CFR 51.1005(a)(1). Under this approach, the EPA interprets the requirement to demonstrate that the area had "no more than one exceedance" of the 24-hour $PM_{2.5}$ NAAQS to mean that the state must simply demonstrate that the area had "clean data" in the attainment year. Thus, a state seeking an attainment date extension for a Moderate nonattainment area for a 24-hour $PM_{2.5}$ NAAQS would be required to demonstrate that the area had clean data with respect to the statistical form of that particular standard (*i.e.,* for the 2006 $PM_{2.5}$ NAAQS, the 98th percentile value did not exceed 35 $\mu g/m^3$) in the calendar year prior to the applicable attainment date for the area. The state would not have to demonstrate that the area also had clean data for any other $PM_{2.5}$ NAAQS, including any annual $PM_{2.5}$ NAAQS or later revision of the 24-hour $PM_{2.5}$ NAAQS. Likewise, a state seeking an attainment date extension for an annual $PM_{2.5}$ NAAQS would be required to demonstrate that the area had clean data for that particular standard (*i.e.,* for the 2012 annual $PM_{2.5}$ NAAQS, the annual mean value did not exceed 12.0 $\mu g/m^3$) in the calendar year prior to the applicable attainment date for the area, but would not have to demonstrate that the area had clean data for any other $PM_{2.5}$ NAAQS.

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[143] For examples of the EPA actions to extend attainment dates for Moderate PM_{10} areas, *see* 61 FR 20730 (May 8, 1996), 61 FR 66602 (December 18, 1996), and 66 FR 32752 (June 18, 2001).

[144] Nonattainment areas designated for both the 24-hour and annual $PM_{2.5}$ NAAQS are located in central and southern CA.

[145] This interpretation as applied to CAA section 188(e) for Serious area attainment date extensions was upheld by the Ninth Circuit Court of Appeals in *Vigil* v. *Leavitt,* 366 F.3d 1025, amended at 381 F.3d 826 (9th Cir. 2004).

The EPA believes this interpretation of CAA section 188(d)(2) is appropriate for two main reasons. First, while most PM_{10} nonattainment areas were designated nonattainment for either just the 24-hour PM_{10} NAAQS or for both the 24-hour and annual PM_{10} NAAQS, the majority of current $PM_{2.5}$ nonattainment areas are, in contrast, designated for either the 24-hour or the annual $PM_{2.5}$ NAAQS, and should arguably only need to demonstrate clean data for the NAAQS for which the area is designated nonattainment. For those few $PM_{2.5}$ nonattainment areas designated for both 24-hour and annual $PM_{2.5}$ NAAQS, the EPA believes it also is appropriate that a state must only demonstrate clean data for the specific NAAQS for which the state is seeking an attainment date extension because such an approach is consistent with the statute's overall approach to designating nonattainment areas and implementing control strategies for each separate $PM_{2.5}$ NAAQS. Second, if an area is designated as nonattainment for both the 24-hour and annual $PM_{2.5}$ standards and receives an extension for one standard while still working toward a later attainment date for the other standard, public health protection would not be delayed because the state would still be subject to the ongoing mandate to adopt and implement measures to ensure expeditious attainment of the other standard.

c. Comments and Responses. Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

2. Process for Attainment Date Extension Request Submissions

a. Summary of Proposal. The proposal recognized that CAA section 188(d) does not specify the process by which the state should submit a Moderate area attainment date extension request, nor how the EPA should evaluate and act upon such a request. The proposal described the elements that the state would be required to submit for the various options proposed regarding the CAA section 188(d) extension criteria for 1) compliance with requirements and commitments in the applicable SIP, and 2) air quality data. The proposal suggested that any Moderate area extension request should be submitted to the EPA by the attainment date for the area (*i.e.,* by December 31 of the attainment year), and it proposed requiring the state to submit certified air quality data for the attainment year to the EPA by February 28 of the following year in order for the EPA to issue a determination within 6 months of the attainment date regarding whether the area attained or failed to attain. The proposal stated that an attainment date extension should be granted only after the agency provides notice in the **Federal Register** and an opportunity for the public to comment. Lastly, the proposal clarified that any 1-year extension would extend from January 1 to December 31 for the year following the year including the December 31 attainment date.

b. Final Rule. As discussed in the previous section, in order for the EPA to make a decision on whether to grant a 1-year attainment date extension, the state needs to submit sufficient information to demonstrate that it has both complied with applicable requirements and commitments in the applicable implementation plan, and that it has clean data for the attainment year. Under the final rule, a state would have to demonstrate that control measures have been submitted in the form of a SIP revision, and that RACM and RACT and additional reasonable measures for sources in the area have been implemented. The SIP revision would need to have been adopted and submitted by the state, but it would not need to have been approved by the EPA in order for the state to qualify for an extension. *See* 40 CFR 51.1005(a)(1)(i). The state also would need to have "clean" air quality data in the attainment year, as explained in the previous section. *See* 40 CFR 51.1005(a)(1)(ii)–(iii). Any decision made by the EPA to extend the attainment date for an area would be based on facts specific to the nonattainment area at issue.

Some commenters suggested that in some cases a state will not know if it should seek an extension request until after the attainment date has passed, particularly for areas that commonly have higher air quality levels in the cooler months at the end of the calendar year. The commenter recommended that states should have until February 28 of the following year to submit an extension request along with certified air quality data. Other commenters stated that there is no legal basis for requiring the certification of monitoring data by February 28th of the following year, and therefore it should not be a requirement that could potentially disqualify a state from having an extension request be approved.

The EPA considered these comments in light of the EPA's obligation under the CAA to issue a determination of attainment or failure to attain within 6 months of the original attainment date. After considering these comments, the EPA strongly recommends that a state should submit a Moderate area 1-year extension request to the appropriate EPA Regional Office by February 28 of the following year. In addition, the EPA strongly recommends that the state provide certified air quality data for the previous calendar year by this date or as close to this date as possible. The EPA understands that there may be certain situations that prevent the full certification of filter-based $PM_{2.5}$ monitoring data by this date. If air quality data for the previous full calendar year has not been fully certified by February 28, the extension request should include any available preliminary data the state can provide. Submission of the necessary air quality data must occur as soon as possible after the attainment date to enable the EPA to review the state's request expeditiously and take appropriate action on the request prior to the date by which the EPA is required to make a determination that the area failed to attain by its Moderate area attainment date, *i.e.,* within 6 months of the applicable attainment date (*see* the discussion of reclassification in Section V of this preamble).

As indicated in the proposal, the EPA believes that an attainment date extension should only be granted after the agency provides notice in the **Federal Register** and an opportunity for the public to comment. A notice-and-comment rulemaking allows for the EPA to adequately evaluate whether the area meets the air quality and program implementation criteria, and to consider other relevant facts and information presented by the state and the public in determining whether the extension request should be granted or denied. This process also is consistent with past practice by the EPA in granting attainment date extensions, most recently for ozone nonattainment areas.

Regarding the extension period, the EPA interprets CAA section 188(d) to authorize the EPA to stipulate that any extension would begin on January 1 and end on December 31 of the extension year, and these dates would not depend on when the state submitted its request for an extension or was granted the extension by the EPA. The EPA is finalizing this interpretation at 40 CFR 51.1005(a)(4). The EPA believes this is a reasonable approach, as the original attainment date for the area will either be the end of the sixth calendar year following designation of the area, or the end of an earlier calendar year if the state demonstrated that it could advance attainment by at least 1 year. In addition, compliance with the relevant NAAQS will be evaluated based on monitored data collected over a full calendar year (*i.e.,* over the period beginning January 1 and ending December 31), so starting the extension year on January 1 is logical.

As noted earlier in this discussion of Moderate area attainment date extensions, CAA section 188(d) provides that a state may seek up to two 1-year extensions of the Moderate area attainment date if it meets the applicable criteria of CAA sections 188(d)(1) and 188(d)(2). The statute makes no distinction between the criteria that must be met for the first 1-year extension and the criteria for the second 1-year extension. Therefore, for a second 1-year attainment date extension request, the EPA intends to apply the same interpretations of the statutory criteria as described earlier in this section, including the recommended deadlines for the state to submit the extension request and the certified air quality data.

c. Comments and Responses.

Comment: Some commenters described the situation where the EPA has approved a Moderate area attainment date that is earlier than the latest date allowed by the statute (for example, assume the approved attainment date is the end of the 5th calendar year after designation). The commenter suggested that if the area was unable to attain by its "earlier" approved attainment date, CAA section 188(d) should be interpreted in a way that would not require the state to submit a request for an attainment date extension. The commenter suggested that the state should only be required to meet the CAA section 188(d) requirements if the area is seeking an extension beyond the latest Moderate area attainment date allowed by statute (*i.e.* the end of the sixth calendar year after designations).

Response: The EPA does not agree with the commenter because the statute appears to address this situation clearly. Section 188(c)(1) of the CAA states that the Moderate area attainment date is "as expeditiously as practicable but no later than the end of the sixth calendar year after the area's designation as nonattainment." If the area had provided an attainment demonstration supporting the approval of an earlier attainment date by the EPA, then that approved attainment date is then regarded as the "applicable attainment date" for that area. Section 188(d)(1) of the CAA of the statute then enables the EPA to grant a 1-year extension for the "date specified in paragraph (c)(1)," which in this case would be the earlier attainment date.

V. Reclassification of a $PM_{2.5}$ Moderate Nonattainment Area to Serious

As discussed elsewhere in this preamble, subpart 4, part D of title I of the CAA establishes a two-tier classification system for areas designated nonattainment for the $PM_{2.5}$ NAAQS. While all areas designated nonattainment are initially classified as Moderate, CAA section 188(b) describes two pathways by which the EPA has the authority and/or the duty to reclassify a Moderate nonattainment area to a Serious nonattainment area. Pursuant to CAA section 188(b)(1), the EPA has general discretionary authority to reclassify from Moderate to Serious any area that the Administrator determines cannot practicably attain the NAAQS by the applicable Moderate area attainment date. Pursuant to CAA section 188(b)(2), the EPA has a mandatory duty to reclassify from Moderate to Serious any area that fails to attain the NAAQS by the applicable Moderate area attainment date. Both of these pathways are more fully described in the following sections.[146]

A. Discretionary Authority

1. Summary of Proposal

The proposal provided background on the EPA's discretionary authority to reclassify a Moderate area to Serious. It proposed to interpret the statute to give EPA broad authority to reclassify based on available information, noting that the EPA could base this determination upon whatever factors are pertinent. The proposal sought comment on whether EPA should discretionarily reclassify an area without a request or submission from the affected state. The proposal also addressed the mandatory statutory timing for discretionary reclassification (*i.e.,* within 18 months of the moderate area SIP due date), and took comment on the appropriateness of EPA acting to reclassify an area beyond 18 months after the Moderate area SIP due date, including right up to the Moderate area attainment date.

2. Final Rule

The final rule remains largely unchanged with regard to this issue. The EPA's discretionary authority to reclassify a Moderate area to Serious derives from language in section 188(b)(1) of the CAA, which provides that: "The Administrator may reclassify as a Serious PM_{10} nonattainment area . . . any area that the Administrator determines cannot practicably attain the [NAAQS] . . . by the attainment date . . . for Moderate Areas." The use of this discretionary authority thus would be triggered by the EPA making a determination that the Moderate area in question cannot practicably attain by its statutory attainment date.

The CAA does not specify the basis on which the EPA may make a determination that the area cannot practicably attain by the applicable attainment date. In the General Preamble, the EPA explained that the agency could base this determination upon whatever facts are pertinent, and could do so whether or not the state in question has submitted a Moderate area attainment plan, and whether or not the state has made the demonstration contemplated in CAA section 189(a)(1)(B).[147] The EPA may make such a determination based on evaluation of the attainment plan for the Moderate area in question, or based on other facts known to the agency. As discussed earlier in this preamble, the attainment plan that a state would submit for a Moderate nonattainment area must include either a demonstration that the area will attain the NAAQS by the statutory Moderate area attainment date or a demonstration that attaining by the statutory Moderate area attainment date is impracticable. If the state makes and the EPA concurs with an impracticability demonstration submitted as part of the attainment plan, then the demonstration could serve as the basis for the EPA initiating a notice-and-comment rulemaking to reclassify the area to Serious.

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[146] Note that a reclassification for a multi-state nonattainment area will be done in a single action by the EPA; separate actions are not needed to reclassify the portion of each state comprising the multi-state nonattainment area.

[147] *See* the **Federal Register** published on April 16, 1994 (57 FR 13498, 13537 and 13538).

However, the CAA does not specify the basis for the EPA's exercise of its discretionary authority and does not require the EPA to make its determination based on a submission from the state. Indeed, such a prerequisite would be illogical in the case of a state that fails to make any attainment plan submission or fails to address the issue of the need for reclassification in such submission. The EPA believes that while a Moderate area impracticability demonstration as contemplated in CAA section 189(a)(1)(B) is desirable in order to help the agency make a determination that the area cannot practicably attain by its attainment date, such a demonstration is not necessary to trigger action by the EPA to reclassify a Moderate area to Serious. The statute does not prohibit the EPA from using the weight of available evidence, including information available in the public record of a state, to make such a determination, even in the absence of a complete attainment plan submission.

Regarding the timing of discretionary reclassifications, CAA section 188(b)(1)(B) establishes timeframes by which EPA is to act if it intends to exercise its discretionary authority to reclassify areas as appropriate following the Moderate area attainment plan due date, stating that "the Administrator shall reclassify appropriate areas within 18 months after the required date for the state's submission of a SIP for the Moderate Area." In the case of areas designated nonattainment for the 2012 $PM_{2.5}$ NAAQS in the first round of designations, states will be required by statute to submit a Moderate area attainment plan within 18 months of the date of designation (April 2015), or no later than October 2016. Pursuant to CAA section 188(b)(1)(B), the EPA would then have until April 2018 (18 months following the Moderate area attainment plan submission deadline) to use its discretionary authority to reclassify any area that the EPA determines at that time cannot practicably attain by the Moderate area attainment date of December 2021.

However, as noted earlier, there may be situations in which it may be appropriate to reclassify an area at a point in time more than 18 months after the SIP due date. On this issue, the General Preamble stated that:

> ". . . under the plain meaning of the terms of section 188(b)(1), EPA has general discretion to reclassify at any time before the applicable attainment date any area EPA determines cannot practically attain the standards by such date. Accordingly, CAA section 188(b)(1) is a general expression of delegated rulemaking authority. In addition, subparagraphs (A) and (B) of CAA section 188(b)(1) mandate that the EPA reclassify at specified timeframes any areas it determines appropriate for reclassification at those dates. These subparagraphs do not restrict the general authority but simply specify that, at a minimum, it must be exercised at certain times." [148]

The EPA continues to consider this the correct interpretation of the statutory requirements concerning its authority to reclassify a Moderate nonattainment area to Serious at any time prior to the area's Moderate area attainment date, if the agency determines that the area cannot practicably attain the relevant $PM_{2.5}$ NAAQS by that date. *See* Section VI.A.2 of this preamble for a discussion of the due dates for submission of attainment plan elements for areas that receive a discretionary reclassification.

The EPA emphasizes that a state with an area designated as nonattainment for the $PM_{2.5}$ NAAQS is required to meet all Moderate area attainment plan requirements, even after the EPA reclassifies the area to Serious. Section 189(b)(1) of the CAA states clearly that "in addition to" the Moderate area attainment plan requirements, states with areas reclassified to Serious must also meet Serious area attainment plan requirements, *i.e.*, the reclassification does not eliminate the statutory obligation to meet Moderate area attainment plan requirements.[149] Thus, the EPA believes that reclassifying Moderate areas to Serious at any time under its discretionary authority does not provide incentives to delay development and implementation of control measures by excusing states from meeting substantive Moderate area attainment plan requirements or by extending the applicable attainment date. The EPA articulated this position in the General Preamble, explaining that this interpretation:

> . . . creates an incentive for the timely submittal and effective implementation of moderate area SIP requirements and facilitates the PM_{10} attainment objective. For example, if an area that fails to submit a timely moderate area SIP is reclassified, this does not obviate the requirement that the area submit and implement RACM consistent with the moderate area schedule. Accordingly, the area could be subject to sanctions for its delay in submitting the RACM SIP requirement . . . Further, reclassification before the applicable attainment date will ensure that additional control measures (*i.e.*, in addition to RACM, serious areas must implement best available control measures (BACM)), are implemented sooner and will expedite the application of more stringent new source review requirements to the area . . . Similarly, where an area submits a timely moderate area SIP, EPA may not discover that the area cannot practicably attain until sometime after it begins implementing its moderate area control measures. The EPA then may want to reclassify the area in order to facilitate the development and implementation of BACM.[150]

The EPA considers this longstanding interpretation of CAA section 188(b)(1) to be the correct interpretation of the statutory requirements governing the discretionary reclassification of Moderate areas. The EPA will reclassify any area it determines cannot practicably attain by the Moderate area attainment date through notice-and-comment rulemaking. *See* 40 CFR 51.1002(b)(1).

3. Comments and Responses

Comment: Some commenters stated that while it may be desirable for a state or local agency to provide an impracticability demonstration to the EPA, the EPA is not prohibited from using the weight of available evidence to reclassify an area to Serious even before the Moderate area plan is due if it has a particularly challenging air quality situation. Other commenters did not agree with the EPA's interpretation of the statute, and believed that the EPA's authority should be limited to reclassification of areas that submit an impracticability demonstration.

Response: For the reasons described earlier, the EPA agrees with the first commenter and does not believe its authority is limited in the manner suggested by the second commenter.

B. Mandatory Duty

1. Summary of Proposal

The proposal provided background on the EPA's mandatory duty pursuant to CAA section 188(b)(2) to reclassify a Moderate area to Serious when the area fails to attain the standard by the attainment date. The CAA directs the EPA to reclassify an area from Moderate to Serious if the area fails to attain the relevant NAAQS by the applicable Moderate area attainment date

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[148] *Ibid.* at 13537.

[149] *See, Vigil* v. *Leavitt*, 366 F.3d 1025, amended at 381 F.3d 826 (9th Cir. 2004).

[150] 57 FR 13498 (April 16, 1992), at page 13537.

(including any attainment date that had been extended by one or 2 years pursuant to CAA section 188(d)). Reclassification occurs by operation of law when the EPA determines that the area failed to attain the NAAQS by the applicable attainment date, in accordance with CAA section 188(b)(2)(A). Section 188(b)(2) of the CAA requires that "within six months following the applicable attainment date for a PM_{10} nonattainment area, the Administrator shall determine whether the area attained the standard by that date" and publish its determination in the **Federal Register**.

The EPA proposed that the date of reclassification would be the effective date of the **Federal Register** notice issued by the EPA that determines the area failed to attain by the attainment date. Thus, for example in the case of the 2012 $PM_{2.5}$ NAAQS, assuming a Moderate $PM_{2.5}$ nonattainment area fails to attain the standard by its approved attainment date of December 31, 2021, the EPA would be required to publish in the **Federal Register** no later than June 30, 2022 its determination that the area failed to attain the NAAQS and is therefore reclassified as Serious by operation of law. The actual date of reclassification for the area would be the effective date of the **Federal Register** document (*e.g.* in July or August 2022). To meet the requirements of CAA section 189(b)(2), the Serious area attainment plan for the area would be due within 18 months of the actual reclassification date (*i.e.,* in early 2024).

The proposal also discussed a possible alternative option, which would be to consider the date of reclassification to Serious to be the same as the Moderate area attainment date. Applying this approach in the example earlier would yield an earlier date of reclassification of December 31, 2021, and an earlier Serious area attainment plan due date of June 30, 2023.

2. Final Rule

Several commenters supported the EPA's proposed approach to interpret the date of reclassification as the effective date of the **Federal Register** notice announcing the area had failed to attain the standard by the Moderate area attainment date because this approach would allow adequate time for the EPA to evaluate air quality data and any exceptional events claims before making the determination that the area failed to attain. Some commenters opposed the proposed approach and supported interpreting the date of reclassification as being the same as the missed attainment date for the Moderate area. This commenter suggested that the proposed approach could introduce additional delay because the EPA does not always issue determinations of failure to attain promptly. They also claimed that the term "reclassified by operation of law" in CAA section 188(b)(2)(A) would have no meaning (*i.e.,* surplusage) if the proposed approach was adopted.

After taking the comments received under consideration, the EPA has decided to retain the proposed approach. The date of reclassification is the effective date of the **Federal Register** notice issued by the EPA that determines the area failed to attain by the attainment date. For practical reasons, the EPA does not believe that as a general matter it can be expected to make a determination on December 31 that an area failed to attain. Because the $PM_{2.5}$ ambient monitoring method requires laboratory analysis of filters prior to determining the ambient mass for each day, adequate time is needed after December 31 to ensure that the filter-based measurements have been evaluated and quality-assured in an accurate manner.

Although CAA section 188(b)(2) does not explicitly address this issue, the EPA believes that this approach is a reasonable interpretation of statutory ambiguity in CAA section 188(b)(2) and preferable over the alternative approach for two additional reasons. First, the statute at CAA section 189(b)(2) gives a state 18 months from the date of reclassification of an area to submit for the EPA's approval an attainment demonstration with air quality modeling and provisions to assure timely implementation of BACM and BACT on sources in the nonattainment area. The workload associated with developing a Serious area plan can be substantial, and the EPA believes that it is reasonable to resolve the statutory ambiguity in favor of providing the state with the full 18 months from the effective date of reclassification to develop and submit a thorough, complete and accurate Serious area attainment plan that will provide for expeditious attainment of the NAAQS. Second, the statutory attainment date for a Serious area reclassified under any circumstances is as expeditious as practicable but no later than the end of the tenth year following designation of the area, and is thus independent of the date of reclassification of the area. Allowing a state some additional amount of time beyond 18 months from the missed attainment date to develop and submit a complete Serious area attainment plan, including adopting BACM and BACT, will not change the statutory obligation on the state for the area to attain the relevant NAAQS by the applicable attainment date. On the contrary, the EPA believes that the extra time may in fact help the area timely attain the relevant NAAQS by allowing the state to develop a more effective attainment plan for the area.

Thus, the EPA interprets the CAA such that the date of reclassification for an area reclassified under the EPA's mandatory duty is to be considered the effective date of the **Federal Register** document announcing that the area had not attained the relevant $PM_{2.5}$ NAAQS and is therefore reclassified by operation of law. The EPA intends to make determinations of whether an area attained the relevant NAAQS pursuant to CAA section 188(b)(2) by notice-and-comment rulemaking. *See* 40 CFR 51.1002(b)(2). Accordingly, the final rule establishes a definition of "date of reclassification" to mean the effective date of a $PM_{2.5}$ area reclassification from Moderate to Serious as promulgated by the Administrator. This definition is then used, for example, to establish the due date for the Serious area SIP. (*See* Section VI.A.1 of this preamble for more information on mandatory reclassification area SIP due dates.)

3. Comments and Responses

Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

VI. Requirements for $PM_{2.5}$ Serious Nonattainment Area Plans

Sections 189(b) and (c) of the CAA include the following requirements for Serious area attainment plan submissions: (i) An attainment demonstration (CAA section 189(b)(1)(A)); (ii) provisions for the implementation of best available control measures (BACM) no later than 4 years after reclassification of the area to Serious (CAA section 189(b)(1)(B)); (iii) quantitative milestones that will be used to evaluate compliance with the requirement to demonstrate RFP (CAA section 189(c)); and (iv) regulation of $PM_{2.5}$ precursors (in general to meet attainment and control strategy requirements, and as specifically required for major stationary sources by CAA section 189(e)). Other subpart 1 requirements for attainment plans not otherwise superseded under subpart 4 also apply to Serious areas for the $PM_{2.5}$ NAAQS, including: (i) a description of the expected annual incremental reductions in emissions that will demonstrate RFP (CAA section 172(c)(2)); (ii) emissions inventories (CAA section 172(c)(3)); (iii) other control measures (besides BACM and

BACT) needed for attainment (CAA section 172(c)(6)); and (iv) contingency measures (CAA section 172(c)(9)).

Additionally, CAA section 189(b)(1) requires that "in addition" to the attainment plan requirements specific to Serious areas, states must also meet all Moderate area attainment plan requirements. The EPA interprets the statutory language of CAA section 189(b)(1) to require states with areas that are reclassified to Serious to meet Moderate area attainment plan requirements, including all areas that the EPA reclassifies through rulemaking under its discretionary authority, even if that occurs before the area has met all of its Moderate area attainment plan requirements.[151] The following section describes the EPA's final actions in this rule regarding Serious area attainment plan requirements in greater detail.

A. Plan Due Dates

The proposal discussed the statutory provisions that informed the options for the submission due dates for the various components of Serious area attainment plans. The timing of Serious area attainment plan elements is dictated by two provisions of the CAA: CAA section 189(b)(2) for certain subpart 4 elements and CAA section 172(b) for subpart 1 elements not superseded by subpart 4 requirements. Section 189(b)(2) of the CAA addresses the due dates for Serious area attainment demonstrations due under CAA section 189(b)(1)(A) and provisions for BACM and BACT implementation under CAA section 189(b)(1)(B). Specifically, section 189(b)(2) stipulates two alternative schedules for states to submit Serious area attainment demonstrations, depending upon the statutory authority governing the reclassification action. For an area reclassified to Serious by operation of law under CAA section 188(b)(2) upon a determination by the EPA that the area failed to attain the relevant NAAQS by the applicable Moderate area attainment date, a state must submit a new attainment demonstration for the area no later than 18 months after reclassification. For an area reclassified to Serious pursuant to the agency's discretionary authority provided under CAA section 188(b)(1), a state must submit a new attainment demonstration no later than 4 years after reclassification of the area.[152] For all Serious nonattainment areas, CAA section 189(b)(2) requires a state to submit within 18 months of an area's reclassification "provisions to assure that the best available control measures [BACM] for the control of PM_{10} shall be implemented no later than 4 years after the date the area is classified (or reclassified) as a Serious Area."

When considering attainment plan due dates for areas that have been discretionarily reclassified, it is also important to keep in mind the requirements of CAA section 188(b)(1). Section 188(b)(1) of the CAA generally states that: "The Administrator may reclassify as a Serious PM_{10} nonattainment area . . . any area that the Administrator determines cannot practicably attain the [NAAQS] . . . by the attainment date . . . for Moderate Areas." In addition, CAA section 188(b)(1)(B) provides that "the Administrator shall reclassify appropriate areas within 18 months after the required date for the state's submission of a SIP for the Moderate Area." Since all Moderate area SIPs are due 18 months after designation, then this provision contemplates that EPA will typically exercise its discretionary reclassification authority within 3 years of the area's designation as nonattainment. Taken together with CAA section 189(b)(2), which for discretionary reclassifications requires the state to submit the attainment demonstration within 4 years of reclassification to Serious, subpart 4 contemplates that attainment plans for discretionary reclassifications will be submitted no later than 7 years after designation. However, as noted in the previous section, the EPA believes it can discretionarily reclassify an area more than 18 months after the Moderate area SIP due date under certain circumstances, meaning that the Serious area attainment demonstration for such a plan could be submitted to EPA more than 7 years after designation. (*See* more discussion in Section V.A of this preamble on the timing of discretionary reclassifications.)

Lastly, because some of the Serious area plan requirements noted earlier are established in subpart 1 of the Act (CAA section 172), the proposal also noted that CAA section 172(b) provides the EPA discretion to set a due date for submission of these subpart 1 attainment plan elements that is no later than 3 years after *designation* of the area. In the Addendum, the EPA interpreted the date of reclassification of a Moderate area to Serious to be analogous to the date of designation of the area to nonattainment. Accordingly, some of the options presented in the proposal included 3 year SIP due dates for certain plan requirements that stem from subpart 1.[153]

1. Area Reclassified to Serious After Failing To Attain the $PM_{2.5}$ NAAQS

a. Summary of Proposal. The proposal noted that for an area reclassified to Serious after failing to attain the $PM_{2.5}$ NAAQS by the Moderate area attainment date, CAA section 189(b)(2) requires the state to submit both the attainment demonstration for an area and provisions to ensure timely BACM and BACT implementation to the EPA within 18 months after reclassification. The EPA proposed a straightforward codification of this 18 month deadline. Assuming the effective date of the **Federal Register** reclassification notice is typically about 6 months after the end of the calendar year, this means that the attainment demonstration and BACM/BACT provisions would be required at about 8 years after designations. The notice also proposed that (1) in addition to BACM/BACT and the attainment demonstration, the emission inventory would also be required to be submitted within 18 months of the effective date of reclassification because it is essential for the development of BACM/BACT determinations; and (2) additional feasible measures (*i.e.,* control measures that may be able to help the area attain by the attainment date or advance the attainment date by a year, and that may be implemented later than BACM/BACT but before the attainment date) would also be required to be submitted within 18 months of the effective date of reclassification because such measures would be identified as part of the overall control measures analysis. Regarding the SIP submission date for the remaining required plan elements (*i.e.,* RFP, quantitative milestones and contingency measures), the proposal included two options: (1) no later than 18 months after reclassification (*i.e.,* at about 8 years after designation, or 2 years prior to the Serious area attainment date; or (2) within 3 years after reclassification (*i.e.,* at about 9.5 years after designation, or 6 months prior to the Serious area attainment date).

b. Final Rule. Some commenters opposed the proposed requirements for SIP elements other than BACM/BACT and the attainment demonstration to be due within 18 months of the effective date of reclassification because they favored providing states with as much time and flexibility as possible to provide their submissions. Other commenters suggested that having all elements—including RFP, quantitative milestones, and contingency measures—be due at the same time would be more administratively efficient for states and would allow for EPA to conduct a single coordinated review of these plans, and should therefore all be due within 18 months of the effective date of reclassification. They also indicated that the alternative would not make sense because RFP, quantitative milestones, and contingency measures are all linked to the attainment demonstration.

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[151] *See Vigil* v. *Leavitt,* 366 F.3d 1025, amended at 381 F.3d 826 (9th Cir. 2004).

[152] Section V of this preamble provides a more detailed discussion of the process for reclassifying areas with severe nonattainment problems to Serious.

[153] Addendum to the General Preamble, 59 FR 41998 (August 16, 1994), at page 42015.

After taking these comments into consideration, the EPA has decided to require all Serious area plan elements to be due within 18 months of the effective date of reclassification for any area reclassified due to a failure to attain by the Moderate area attainment date. The EPA believes that the proposed alternative 3 year deadline, which would have allowed some elements to be submitted as late as 6 months prior to the attainment date, would mean that the state would be required to submit two different SIPs and would require greater state government resources to conduct the administrative and public procedures required to submit the separate plans to the EPA. This approach also would not provide the EPA with sufficient time to appropriately review and take action on the state's submission prior to the attainment date. It also is appropriate to have the RFP, quantitative milestones, and contingency measures elements be developed and submitted at the same time as the attainment demonstration because they build from the information in the attainment demonstration. The EPA also maintains that requiring states to submit all elements of an attainment plan by the same date is reasonable because it allows for a complete review of the state submission by the EPA, regulated entities, and the general public, and it also should prove to be most efficient for states and the EPA. The EPA further agrees with commenters that a program requiring two submissions rather than one can generally be expected to be less administratively efficient because it will involve separate public hearings and comment periods at the state level, and separate proposed and final approval actions in the **Federal Register** by the EPA. Thus, the final rule requires any area that has been reclassified to Serious as a result of a failure to attain the standard by the Moderate area attainment date to submit all the plan elements to the EPA within 18 months of reclassification: updated base year emission inventory (described in more detail in the next section); BACM/BACT determinations and adopted regulations; analysis of additional feasible measures (*i.e.,* control measures that may be able to help the area attain by the attainment date or advance the attainment date by a year, and that may be implemented later than BACM/BACT but before the attainment date) and adopted regulations, as appropriate; attainment demonstration; RFP; quantitative milestones; and contingency measures. *See* 40 CFR 51.1003(b)(2)(ii).

c. Comments and Responses. Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

2. Area Reclassified to Serious Because the EPA Finds in Its Discretion That the Area Cannot Practicably Attain the NAAQS by the Statutory Moderate Area Attainment Date

a. Summary of Proposal. The proposal noted that for an area reclassified to Serious because the area cannot practicably attain the standard by the Moderate area attainment date, CAA section 189(b)(2) requires the state to submit its BACM/BACT analyses and any adopted regulations to the EPA within 18 months; and to submit the attainment demonstration within 4 years of reclassification. Similar to the proposal for mandatory reclassification areas, the notice also proposed that an updated emission inventory (required under section 172(b) of the CAA) be required to be submitted within 18 months of reclassification because it is essential for the development of BACM/BACT determinations.

The notice also discussed a potential control measure option (described in Section VI.D. of the proposal, Attainment Plan Control Strategy, at page 15410) that would closely link the BACM/BACT determinations to the attainment demonstrations (rather than consider BACM/BACT as an independent requirement). Therefore, to facilitate this linked approach to BACM/BACT, an alternative option was proposed for submission of the attainment demonstration within 18 months of reclassification, instead of within 4 years.

The proposal also addressed the remaining plan elements: additional feasible measures (*i.e.,* control measures that may be able to help the area attain by the attainment date or advance the attainment date by a year, and that may be implemented later than BACM/BACT but before the attainment date); RFP; quantitative milestones; and contingency measures. Two SIP submission due date options were proposed for the remaining plan elements: (1) No later than 3 years after reclassification[154]; or (2) no later than 4 years after reclassification. The proposal requested comments on all of the proposed options for the various elements of a Serious area attainment plan.

b. Final Rule. Most commenters opposed the option requiring the attainment demonstration to be due within 18 months, at the same time as the BACM/BACT submission. Some of these commenters suggested that a 4-year due date for the attainment demonstration and other elements would provide maximum flexibility to the states. While some commenters acknowledged the reasoning behind requiring submittal of the attainment demonstration and BACM/BACT at the same time if BACM/BACT is linked to the attainment demonstration, most commenters favored an approach that provided additional time for submittal of the attainment demonstration.

Some commenters stated that for an area that is reclassified to Serious because it cannot practicably attain the NAAQS by the Moderate area attainment date, CAA section 188(b)(1)(B) requires the EPA to reclassify the area within 3 years of designation (*i.e.* within 18 months of the Moderate area SIP due date), and then per CAA section 189(b)(2) the attainment demonstration for such area would be due 4 years later (*i.e.,* 7 years from designation). The commenter stated that, if the EPA finalizes any discretionary reclassifications beyond 3 years after designation, then it cannot allow the area to have the full 4 years for development of the attainment demonstration because it would undermine the deadlines and schedules that Congress was plainly trying to impose.

For discretionary reclassification areas, just as for mandatory reclassification areas, the EPA is finalizing the statutory due date of 18 months for the BACT/BACM submission. However, after considering comments received on the timing options for submission of the attainment demonstration, the EPA has determined that the attainment demonstration should generally be due later than 18 months for areas subject to discretionary reclassifications. Because the statutory provision in CAA section 189(b)(2) provides up to 4 years, the EPA believes that an appropriate default due date for the attainment demonstration should be 4 years after reclassification for areas reclassified within 3 years of initial designation. However, after further consideration of this issue, the EPA also believes that a due date of less than 4 years should be required for areas that are reclassified closer to the Moderate area attainment date (*i.e.,* reclassified between 4 and 6 years after initial designation). In considering what would be a reasonable submission deadline for the attainment demonstration in this situation, the EPA considered the provisions applicable to areas that fail to attain by the attainment date. Specifically, CAA section 189(b)(2) requires the attainment demonstration (and the rest of the plan) to be submitted no later than 8 years after designation. As explained further, the EPA believes this requirement provides a reasonable outer bound for submission of Serious area plans for any area that is discretionarily reclassified to Serious.

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[154] Under the EPA's prior interpretation as described in the Addendum at 42015, the EPA had suggested that states could submit contingency measures no later than 3 years after reclassification of an area to Serious because of the language of CAA section 172(b).

The circumstance that one of the commenters identifies, where the EPA reclassifies an area to Serious at a point in time more than 3 years after designation, raises an important timing issue that was not explicitly addressed in the proposal. The EPA was aware that it might need to reclassify an area to Serious beyond 3 years after designation (*e.g.,* for an area that fails to submit a Moderate area attainment plan at all; or for an area that is discretionarily reclassified by the EPA because it has very high air quality values). However, the proposal did not address the issue of when the attainment demonstration and other elements should be required for submission when this circumstance occurs. The comment raises the question regarding whether, in the most extreme example, it would be reasonable for an area to be reclassified just before the Moderate area attainment date (end of the sixth calendar year after designation) and then to have until just before the Serious area attainment date (end of the tenth calendar year after designation) to submit the attainment demonstration. This situation would provide little meaningful time for the state and relevant emissions sources to implement measures to reach attainment by the attainment date, nor would it provide sufficient time for the EPA to review and take action on the plan.

The EPA maintains that the statutory authority to "reclassify as a Serious PM–10 nonattainment area . . . any area that the Administrator determines cannot practicably attain [the NAAQS] by the attainment date . . . for Moderate Areas" includes the authority to make that determination and issue a discretionary reclassification any time before the Moderate area attainment date, as long as doing so does not otherwise unreasonably frustrate the primary goals of the statute. For example, the EPA must consider the timing for submission of Serious area SIP requirements to ensure the state has sufficient time to implement an effective plan and the agency has sufficient time to review and act on the plan in advance of the outermost Serious area attainment date (*i.e.,* the end of the tenth calendar year after initial designation as nonattainment). *See* CAA section 188(c)(2).

The EPA interprets the statute to provide authority to require submission of attainment plan requirements, including the attainment demonstration, by a date less than 4 years from reclassification to Serious when exercising its discretionary authority to reclassify an area to serious nonattainment pursuant to CAA section 188(b)(1). While the EPA generally prefers to give states as much time as possible to develop and submit plans, the agency concluded that allowing 4 years for submission of the attainment demonstration in all discretionary reclassification actions would potentially frustrate the goals of the statute.

To resolve this issue, EPA is finalizing a specific schedule for submission of the attainment demonstration following discretionary reclassification. As discussed earlier, the terms of the statute provide some guidance as to the appropriate schedule because, as explained earlier, a state would have until the end of the 7th calendar year to submit the attainment demonstration after a discretionary reclassification that follows the timing in CAA section 188(b)(1)(B), and a state would have until the end of the 8th calendar year after a mandatory reclassification to submit the attainment demonstration. *See generally* CAA sections 188(b) and 189(b).

While not dispositive, these provisions indicate that Congress believes that Serious area attainment plans should be submitted at least 2 years in advance of the outermost statutory attainment date for Serious areas to ensure expeditious attainment of the NAAQS. The EPA finds that a minimum of 2 years is appropriate because (1) it provides time for emission reduction measures adopted by the state to take effect and improve air quality; (2) it will allow the agency sufficient time to evaluate and act on the Serious area attainment demonstration; and (3) for every other NAAQS, the CAA SIP submission dates are generally 2 years or more prior to the attainment date. If for example the plan is not submitted until just before year 10, and the agency determines the plan will not lead to attainment, there will be no time to take corrective action before the attainment date to ensure attainment of the NAAQS. Such a result would not be reasonable.

Therefore, the EPA believes that a reasonable attainment demonstration due date for any discretionary reclassification to Serious would be the earlier of (1) 4 years from the date of reclassification, or (2) the end of the eighth calendar year after designation. As an example, an area that is reclassified at the end of year 5 would have 3 years rather than four years to submit the attainment demonstration and other plan elements by the end of year 8. An area that is reclassified no later than the end of year 4 would have the full four years, and any area reclassified after this point would have less than 4 years. At the outer extreme, in the unlikely event that the EPA chooses to exercise its discretion to reclassify an area in the sixth calendar year after designation (*i.e.,* within a year of the attainment date), the area would still have 2 years to submit the attainment demonstration, which is still no less than the timeframe Congress provided for a Moderate area that is reclassified because it fails to attain. *See* 40 CFR 51.1003(b)(2)(i).

Lastly, this section addresses appropriate SIP submission dates for the other required plan elements. Regarding the base year emission inventory, the EPA believes it is appropriate to require the updated base year emissions inventory at the same time that the BACM/BACT submission is due (18 months) because the updated inventory will be a critical element relied on for making control measure determinations. Regarding the remaining planning elements (*i.e.,* additional feasible measures, RFP, quantitative milestones, contingency measures, and attainment projected inventory), the proposed options allowed for the possibility of up to three separate submissions under certain policy combinations, and we believe having such an outcome would be very inefficient. Thus, the EPA has determined that the remaining elements must be submitted at the same time as the attainment demonstration (*i.e.,* the earlier of 4 years from the date of reclassification, or the end of the eighth calendar year after designation). This approach will provide for the most efficient process and at the same time provide the states with the maximum reasonable time when they are reclassified pursuant to the EPA's discretionary authority in CAA section 188(b)(2).

With regard to the due date for submission of NNSR program revisions that may be required when an area is reclassified to Serious, such as revisions to meet nonattainment NSR program requirements to lower the "major stationary source" threshold from 100 tons per year (tpy) to 70 tpy (CAA section 189(b)(3)) and to address the control requirements for major stationary sources of $PM_{2.5}$ precursors [CAA section 189(e)],[155] the Act does not specify a deadline for the State's submission following reclassification of a Moderate $PM_{2.5}$ nonattainment area as Serious nonattainment under subpart 4. Pursuant to EPA's gap-filling authority in CAA section 301(a) and to effectuate the statutory control requirements in section 189 of the Act, the final rule requires the state to submit these nonattainment NSR SIP revisions no later than 18 months after the effective date of final reclassification. This due date is also consistent with the due date for submission of BACM and BACT provisions and the emission inventory; thus, at most, a state will have two required SIP submissions after being reclassified. *See* 40 CFR 51.1003(b)(2)(i) and (ii).

c. Comments and Responses. Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

B. Emissions Inventory Requirements

1. Summary of Proposal

The EPA proposed that the inventory requirements for Serious areas were the same as those for Moderate areas with some additions. In addition to the Moderate area requirements, the EPA proposed that Serious area inventory requirements would include using a major source threshold of 70 tons/year for reporting sources as point sources for both the base year inventory for the nonattainment area and the attainment projected inventory for the nonattainment area.

With regard to the due date for the attainment projected inventory for the nonattainment area, the EPA proposed two cases. In the case where the area is reclassified after failing to attain the NAAQS by the Moderate area attainment date, the attainment projected inventory for the nonattainment area was proposed to be submitted no later than 18 months after reclassification. In the case where the area is reclassified by the EPA because the area cannot practicably attain the NAAQS by the statutory attainment date, the EPA proposed that the attainment projected inventory for the nonattainment area would be due no later than 4 years after reclassification.

2. Final Rule

a. What Emissions Inventory Requirements Apply to Serious Area Attainment Plans? As with Moderate $PM_{2.5}$ nonattainment areas, Congress did not create a specific emissions inventory requirement in subpart 4 that would supersede the emissions inventory requirement under subpart 1 for Serious areas. Thus, the statutory emissions inventory requirements that apply for Serious area attainment plans continue to be those of section 172(c)(3), which explicitly requires "a comprehensive, accurate, current inventory of actual emissions of the relevant pollutants" in the nonattainment area. In addition, the specific attainment plan requirements for the $PM_{2.5}$ NAAQS set forth in section 189(a) and associated modeling requirements make an accurate and up-to-date emissions inventory a critical element of any viable attainment plan. Finally, the additional attainment plan requirements for the $PM_{2.5}$ NAAQS for Serious areas contained in subpart 4 at section 189(b) have additional requirements that affect the emissions inventory requirements for Serious areas.[156]

As noted earlier in this preamble, states must use the best available, current emissions inventory information for attainment plan development, because complete, high quality emissions inventory data are essential for the development of an effective control strategy. To assist states in preparing complete, high quality inventories, the EPA provides guidance for developing emissions inventories in its SIP Emissions Inventory Guidance, available at *https://www.epa.gov/air-emissions-inventories/emissions-inventory-guidance-documents.* The EPA recommends that states consult this guidance while developing emissions inventories to meet requirements for Serious area attainment plans.

b. How do States Meet the Inventory Requirements for the $PM_{2.5}$ NAAQS for Areas Classified as Serious? As with Moderate $PM_{2.5}$ nonattainment areas, neither section 172(c)(3) nor the provisions specifically applicable to attainment plans for the $PM_{2.5}$ NAAQS in subpart 4 specify how states should meet statutory emissions inventory requirements for Serious $PM_{2.5}$ nonattainment areas. Section 172(c)(3) requires that states submit "a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in such area, *including such periodic revisions as the Administrator may determine necessary to assure that the requirements of this part are met*" (emphasis added). The EPA interprets this provision to authorize the agency to require states to revise their base year emissions inventories whenever the state is required to submit a new attainment plan because of a change in the nonattainment area's status (*e.g.* failure to attain by the applicable attainment date resulting in reclassification). In addition, pursuant to CAA section 301, the EPA has additional authority to promulgate regulations as necessary for the implementation of the $PM_{2.5}$ NAAQS, including requirements pertaining to emissions inventories. Accordingly, this rule includes specific emissions inventory requirements that the EPA considers necessary to effectuate the attainment plan requirements of the CAA for the $PM_{2.5}$ NAAQS.

Like Moderate areas, there are three key facets of the emissions inventory requirements: (i) The types of inventories required; (ii) the content of these inventories; and, (iii) the timing of submission of these inventories. The three facets are addressed in the following paragraphs.

First, the same two types of inventories required for Moderate areas are also required for Serious areas. While these inventories are the same types and names of inventories as for Moderate areas, they must be created specifically for Serious area attainment plans in accordance with the applicable Serious area requirements. The first type of inventory is called the "base year inventory for the nonattainment area," and the second type of inventory is called the "attainment projected inventory for the nonattainment area." *See* 40 CFR 51.1000. The attainment projected inventory is necessary to implement the attainment demonstration requirement of section 189(a)(1)(B), and it also may be used as part of the RFP requirement (*see* Section VI.F). For these reasons, this rule establishes a regulatory requirement that Serious area attainment plans must include a base year inventory for the nonattainment area and an attainment projected inventory for the nonattainment area.

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[155] Section 189(e) of the CAA requires that the control requirements applicable to major stationary sources of $PM_{2.5}$ also apply to major stationary sources of $PM_{2.5}$ precursors, except where the state demonstrates to the EPA's satisfaction that such sources do not contribute significantly to $PM_{2.5}$ levels that exceed the standard in the area.

[156] All definitions described in Section III.B of this preamble for areas classified as Moderate apply in this section.

Second, the content of the inventories will follow the content requirements for Moderate area inventories, with two exceptions needed to meet the requirements of section 189(b)(3). The first exception for Serious areas stems from the Section 189(b)(3) definition of a separate emissions threshold for major sources in Serious nonattainment areas (70 tpy potential to emit of PM_{10}). This threshold is lower than the 100 tpy potential to emit general requirement for major sources of PM_{10}, $PM_{2.5}$ or one of its precursors that is used for Moderate area emissions inventories. Inventories for Serious area attainment plans must include these smaller sources as major stationary sources (rather than the nonmajor stationary source category that would apply for these in Moderate area plans) using the lower threshold specified in the CAA. Also as described earlier and in 40 CFR part 51, subpart A, this means that all other smaller stationary sources within the nonattainment area must be included in the base year inventory and projected attainment year inventory as nonpoint sources.

As described previously for Moderate areas, Appendix A of Table 1 of 40 CFR part 51, subpart A (the AERR) is required by this rule to define which sources must be reported as point sources for inventories associated with this rule (base year and projected attainment year inventories). To be consistent with the 70 tpy threshold finalized in this rule, this rule is also amending Table 1 of Appendix A of the AERR to include the 70 tpy threshold for $PM_{2.5}$, SO_2, NO_X, VOC and ammonia for point sources within nonattainment areas.

The second difference between the Serious area and Moderate area inventory requirements is a minor wording difference for the year that should be chosen for the base year inventory. The year should be one of the 3 years used for reclassification (rather than designation for Moderate areas) or another technically appropriate inventory year. Another inventory year may be chosen under specific circumstances (*e.g.,* to account for a change in sources in the nonattainment area, changes in nonattainment area boundaries, or significant time lag between designations and preparation of the inventory) with consultation from the appropriate EPA Regional Office. This requirement is intended to ensure that the inventory will represent the emissions sources whose contributions resulted in a nonattainment designation for the area.

The third facet of the Serious area inventory requirements is the timing, which is somewhat different than for Moderate areas. Section VI.A of this preamble describes the requirement that states submit the base year inventory for a Serious nonattainment area at the same time that it submits provisions to implement BACM and BACT on sources in the area (due no later than 18 months from reclassification of the area pursuant to section 189(b)(2)). This is because the base year inventory serves as the starting point for conducting a BACM and BACT determination. In contrast to the base year inventory, the attainment projected inventory is more closely related to the Serious area attainment demonstration. Thus, the attainment projected inventory is most appropriately submitted with the attainment demonstration for a given Serious area to allow effective evaluation of the attainment plan as a whole.

Consequently, this rule requires that attainment projected emissions inventories be submitted at the same time as the Serious area attainment demonstration. This requirement gives rise to two possible deadlines for Serious areas to submit the attainment projected emissions inventory for the nonattainment area. For areas that are reclassified after failing to attain the NAAQS by the applicable Moderate area attainment date, the deadline is no later than 18 months after reclassification (same time period as for Moderate areas). For areas reclassified by the EPA because the area cannot practicably attain the NAAQS by the statutory Moderate area attainment date, the deadline is the earlier of 4 years from the date of reclassification, or the end of the eighth calendar year after designation.

3. Comments and Responses

Comment: Some commenters noted that the proposal was unclear with regard to the inventory year for areas that are reclassified from Moderate to Serious, and whether the terms "reclassification" and "designation" are interchangeable in this regard.

Response: In the final rule, the EPA clarifies that for areas that are redesignated to Serious, the inventory year must be one of the 3 years used for reclassification. Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

C. Pollutants To Be Addressed in the Plan

All $PM_{2.5}$ precursors are presumptively required to be addressed in any Serious area attainment plan. Section III of this preamble includes a detailed discussion about optional analyses that a state may provide to demonstrate that sources of a precursor do not significantly contribute to $PM_{2.5}$ concentrations in a particular nonattainment area. These demonstrations may be conducted for all sources of a precursor in an area (*i.e.,* comprehensive precursor demonstration), or just for major sources of the precursor (*i.e.,* major source precursor demonstration). It also discussed a similar demonstration that may be conducted for NNSR (*i.e.,* NNSR precursor demonstration). These demonstrations may be used to justify the exclusion of certain types of precursor sources from certain SIP requirements in Serious area plans, just as in Moderate area plans. However, the expeditious attainment demonstration is not available for Serious area plans.

As noted in Section III of this preamble, if the EPA approves a state's precursor demonstration for the Moderate area plan, the state would need to re-evaluate whether the precursor contributes significantly to $PM_{2.5}$ levels that exceed the standard for the Serious area plan. The reason for this is that precursor emissions and air quality concentrations will have changed since the submission of the demonstration for the Moderate area, and precursor emissions technical information and scientific understanding of precursor emissions and interactions in the area should be better understood several years later, and the Serious area plan needs to be based on the best available information to date. If the state reevaluates a precursor for potential exclusion from one or more of the Serious area plan requirements, it should take into account factors such as increases or decreases in emissions since the last precursor demonstration; new ambient monitoring data for fine particle composition and concentrations of important gases (such as ammonia); and improved air quality modeling programs that reflect improved understanding of the role of precursors in atmospheric transformation processes. To the extent appropriate, this precursor demonstration can build off the analyses conducted for the Moderate area precursor demonstration.

If the EPA approves a comprehensive precursor demonstration for the Serious area plan, then the state would not be obligated to evaluate BACM/BACT measures for reducing that precursor in the nonattainment area, nor would it need to account for that precursor in the RFP plan, quantitative milestones, and contingency measures. If a major stationary source precursor demonstration is approved, then the state would not be obligated to evaluate BACM/BACT measures for reducing that precursor from major sources in the nonattainment area, nor would it need to account for emissions of that precursor from major sources in the RFP plan, quantitative milestones, and contingency measures. If a NNSR precursor demonstration is approved, then the state would not be obligated to address LAER and emission offset requirements for that precursor in the NNSR program for that nonattainment area.

D. Attainment Plan Control Strategy

1. General Approach to Designing a Control Strategy for a Serious Nonattainment Area

The statutory attainment planning requirements of subparts 1 and 4 were established to ensure that states meet the following goals of the CAA: (i) Implement measures that provide for attainment of the $PM_{2.5}$ NAAQS as expeditiously as practicable, and (ii) adopt emission reduction strategies that will be effective at reducing $PM_{2.5}$ levels in nonattainment areas. A state has discretion to require reductions from any source inside or outside of a $PM_{2.5}$ nonattainment area (but within the state's boundaries) in order to fulfill its obligation to demonstrate attainment in a $PM_{2.5}$ nonattainment area as expeditiously as practicable, in addition to having an obligation to meet the statutory requirements for specific control measures on sources located within a nonattainment area (*e.g.,* BACM and BACT). A state may need to require emissions reductions on sources located outside of a $PM_{2.5}$ nonattainment area if such reductions are needed in order to provide for expeditious attainment of the $PM_{2.5}$ NAAQS.

The following sections describe the recommended approach for a state to follow in order to identify and select the complete suite of measures needed for an approvable attainment plan submission for a Serious $PM_{2.5}$ nonattainment area.

2. Identification and Selection of BACM/BACT and Additional Feasible Measures

a. Summary of Proposal. The proposal provided background information on statutory requirements and existing guidance regarding Serious area control strategies, and then presented two broad approaches describing the steps for determining BACM/BACT and additional feasible measures (*i.e.* control measures that may be able to help the area attain by the attainment date or advance the attainment date by a year, and that may be implemented later than BACM/BACT but before the attainment date). The first approach is consistent with current guidance for PM_{10} NAAQS implementation in the Serious Area Addendum. Under the first approach, the emphasis of the analysis would be on the identification of feasible control measures. The analysis would be considered to be "generally independent" of whether such measures are needed for expeditious attainment of the relevant NAAQS. However, this approach also would allow the state to identify *de minimis* source categories *before* conducting any further analysis of technologically feasible or economically feasible control measures. The proposal requested comment on inclusion of an ambient impact threshold of 3 percent for determining whether a source category impact would be *de minimis.* This proposed threshold level was similar to the *de minimis* ambient levels included in the Serious Area Addendum for implementation of the PM_{10} NAAQS, and the state would likely need to conduct air quality modeling to demonstrate *de minimis* impacts below a particular threshold. The proposal noted the challenges associated with providing a nationally consistent definition of what would be a "source category." For source categories found to be *de minimis,* the state would not be obligated to evaluate potential control measures. The basic analytical steps for proposed option 1 were presented as follows: (1) Update base year emissions inventory for the area; (2) evaluate source category impacts; (3) identify existing and potential control measures; (4) determine whether an available control measure or technology is technologically feasible; (5) determine whether an available control measure or technology is economically feasible; (6) determine the earliest date by which a control measure or technology can be implemented in whole or in part.

Under the second proposed option, there would be a greater emphasis on linking the control strategy evaluation process with the attainment needs for the area. Accordingly, this option would not include a "*de minimis*" step 2 early in the process. However, at the end of the process, the state would be able to choose to not adopt certain measures that would otherwise meet the criteria for BACM/BACT if those measures collectively would not be necessary to bring the area into attainment or to advance the attainment date by 1 year (similar to the approach that EPA uses, and has historically used, for RACM/RACT). The EPA requested comment on all aspects of these options, and indicated the agency may finalize either approach or various elements of each approach after evaluating the comments that had been received.

b. Final Rule. The EPA has considered the comments that were submitted on the two proposed options for determining BACM/BACT (and additional feasible measures), and has determined that the final rule should include aspects of each option. The following sections provide background information and guidance on the steps of the process for determining Serious area control measures for $PM_{2.5}$ nonattainment areas.

i. BACM and BACT

A Serious area attainment plan must include provisions to implement BACM on sources in a Serious nonattainment area, as provided by section 189(b)(1)(B), no later than 4 years after reclassification. Under section 189(b)(2), a state has 18 months following reclassification to submit these BACM provisions.

Section 189(b)(1)(B) refers only to BACM, but the EPA has long interpreted this term to include BACT, just as the analogous term for RACM includes RACT for Moderate areas. For implementation of the $PM_{2.5}$ NAAQS, the EPA finds it reasonable to maintain the same interpretation. The legislative history for the 1990 Amendments to the CAA supports this interpretation, as the EPA has explained in past guidance.[157] Additionally, the requirement for BACT for existing sources in the context of $PM_{2.5}$ NAAQS implementation in nonattainment areas is separate and distinct from the requirement for BACT for new and modified sources under the Prevention of Significant Deterioration (PSD) permitting program for new stationary sources in areas designated as attainment or unclassifiable for the $PM_{2.5}$ NAAQS. As described later in this section, however, the process and criteria that states have historically used to determine BACT for new and modified sources under the PSD program have also been referenced and applied to the process for determining BACT for PM_{10} NAAQS implementation, but these requirements are otherwise unrelated. Consistent with past policy, BACT determinations for $PM_{2.5}$ NAAQS implementation are to follow the same process and criteria that are applied to the BACT determination process for the PSD program.

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[157] *Ibid.* at 42008–09.

Longstanding guidance in the General Preamble and Addendum, together with past practice associated with implementing the PM_{10} NAAQS under subpart 4, has helped to establish a general approach for states and the EPA to determine BACM and BACT for Serious PM_{10} nonattainment areas. This approach has served as the basis for developing a more stringent control strategy for a Serious PM_{10} nonattainment area than that developed for such area when it was classified as Moderate. Indeed, as BACM and BACT are required to be implemented when a Moderate nonattainment area is reclassified as Serious due to its actual or projected inability to attain the relevant NAAQS by the Moderate area attainment date through the implementation of "reasonable" measures, it is logical that "best" control measures should represent a more stringent and potentially more costly level of control.[158] The level of stringency generally refers to the overall level of emissions reductions of a control measure or technology, or of such measures and technologies combined.

Congress first defined BACT in CAA section 169(3) for the PSD permitting program as: "an emission limitation based on the maximum degree of reduction of each pollutant . . . which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques . . ."

In the Addendum, the EPA provided guidance concerning the requirements for BACM and BACT for Serious area attainment plan requirements for the PM_{10} NAAQS.[159] The EPA discussed in the Addendum that when Congress amended the CAA, Congress selected the same "best" terminology for PM_{10} nonattainment areas as it did for the language selected for the PSD program in 1977. The EPA interpreted this word choice at the time to mean that PSD BACT and PM_{10} nonattainment area BACM should be generally analogous in definition and implementation, but with some differences due to different end policy goals between the PSD and nonattainment area programs.[160] The EPA thus defined BACM for PM_{10} Serious nonattainment area planning to be the maximum degree of emission reduction achievable from a source or source category which is determined on a case-by-case basis, considering energy, economic and environmental impacts and other costs.[161]

ii. BACM/BACT "Generally Independent" of Attainment

As noted earlier, the issue of whether BACM/BACT should be considered generally independent of attainment or more closely tied to attainment for purposes of implementing the $PM_{2.5}$ NAAQS was a central issue distinguishing the two proposed options for determining BACM/BACT. Some commenters suggested that the overarching requirement of the CAA is to attain the standard expeditiously, and therefore the benefits of a "generally independent" BACM/BACT requirement are not clear. On the other hand, some other commenters supported maintaining the longstanding policy from the Serious Area Addendum that the BACM/BACT requirement is generally independent of attainment, citing the emphasis on "best" control measures and the statutory provision requiring BACM/BACT well before the attainment demonstration for certain reclassified areas. For the reasons discussed later in this section, the EPA has decided to maintain the policy that BACM/BACT determinations are to be "generally independent" of attainment for purposes of implementing the $PM_{2.5}$ NAAQS.

In the Serious Area Addendum, the EPA described BACM as a generally independent requirement, to be determined without regard to the specific attainment analysis (*i.e.*, attainment demonstration) for the area.[162] The EPA established that such an interpretation is in accordance with the structural scheme of the CAA, which by its definition requires that when an area is classified as Serious, BACM are implemented in addition to RACM. Because of the two types of measures employed, the EPA found it reasonable to interpret the statute as requiring a different analysis for determining BACM, *i.e.*, that while RACM emphasizes the attainment needs of the area, BACM has a greater emphasis on identifying measures that are feasible to implement. Keeping in mind that the overall objective of the implementation of BACM and BACT and additional feasible measures is to bring a Serious $PM_{2.5}$ nonattainment area into attainment as expeditiously as practicable, the General Preamble noted that the test for BACM puts a "greater emphasis on the merits of the measure or technology alone," rather than on "flexibility in considering other factors," in contrast to the approach for determining RACM and RACT.[163]

The view that BACM and BACT measures are generally independent of the attainment needs of the area is also consistent with the statutorily specified submission date for BACM and BACT control measures, contrasted against the statutorily specified submission date for the attainment demonstration for Serious areas. Specifically, states with Serious nonattainment areas must submit BACM and BACT measures within 18 months of reclassification of areas to Serious, whereas they are given up to 4 years from reclassification (for areas where it is impracticable to attain by the attainment date) to submit the attainment demonstration for such areas.

Additionally, the EPA believes that interpreting the Serious $PM_{2.5}$ nonattainment area BACM/BACT requirements to be "generally independent" of attainment is consistent with the structure and substance of the CAA control measure requirements for ground-level ozone nonattainment areas with more serious air quality problems. In the CAA ozone implementation requirements, an area that is reclassified to a more serious category because it failed to attain the standard or because it is impracticable to attain by the attainment date is then subject to additional specific control measure requirements that are considered to be generally independent of attainment (for example, *see* CAA section 182(b) through (e)). The statute includes these specific requirements in order to ensure continued progress toward attainment for these areas with more difficult air quality problems. The EPA believes it is appropriate to have a similar interpretation of the $PM_{2.5}$ Serious area control measure requirements. In a similar manner, interpreting BACM/BACT to be generally independent of the attainment needs of a Serious $PM_{2.5}$ area will ensure continued progress toward attainment for those areas with more difficult air quality problems. The EPA also believes this more rigorous "independent control measure" approach for implementing the $PM_{2.5}$ standards in a manner similar to ozone is appropriate because the health effects of both standards are very significant (including premature mortality), and robust emission reduction programs are needed to bring about expeditious attainment and public health protection for citizens in these nonattainment areas.

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[158] *Ibid.* at 42009.

[159] *Ibid.* at 42009.

[160] *Ibid.* at 42010. "EPA will interpret PSD BACT and PM–10 BACM as generally similar because, despite the similarity in terminology, certain key differences exist between control measures applicable in the PSD and PM–10 serious nonattainment area programs. The BACT under the PSD program applies only in areas already meeting the NAAQS, while PM–10 BACM applies in areas which are seriously violating the NAAQS. The difference in policy goals, arguably, suggests that the PM–10 BACM control standard should be more stringent than that for PSD BACT . . . EPA considers it reasonable to use the approach adopted in the PSD BACT program as defined in section 169(3) of the Act as an analogue for determining appropriate PM–10 nonattainment control measures in serious areas, while at the same time retaining the discretion to depart from that approach on a case-by-case basis as particular circumstances warrant."

[161] *Ibid.*

[162] *Ibid.* at 42011.

[163] Ibid at 42011.

iii. No de Minimis Source Category Analysis for $PM_{2.5}$ NAAQS Implementation

Another central issue distinguishing the two proposed options for how to determine BACM/BACT was the issue of whether, before analyzing any potential BACM/BACT, the state should conduct technical analyses to identify whether there are any source categories having a *de minimis* contribution to $PM_{2.5}$ levels in the $PM_{2.5}$ nonattainment area. This *de minimis* analysis is part of the process described in the Serious Area Addendum for implementation of the PM_{10} standards. Under the proposal, for source categories found to be *de minimis,* the state would not be obligated to evaluate potential control measures.

As noted previously, the proposal requested comment on inclusion of an ambient impact threshold of 3 percent for determining whether a source category impact would be *de minimis.* This proposed threshold level was similar to the *de minimis* ambient levels included in the Serious Area Addendum for implementation of the PM_{10} NAAQS, and the state would likely need to conduct air quality modeling to demonstrate *de minimis* impacts below a particular threshold. The proposal noted the challenges associated with providing a nationally consistent definition of what would be a "source category."

The EPA also proposed a similar *de minimis* source category concept for the RACM/RACT process for Moderate area plans, and many of the comments received on the proposed Moderate area "upfront" *de minimis* source category analysis are also applicable when considering whether to include a *de minimis* source category analysis concept for Serious areas in the final rule. A number of commenters expressed concern about the analytical resources that might be needed to conduct air quality modeling to identify whether all the sources in a particular source category have an ambient air quality contribution exceeding an air quality threshold. Some commenters suggested that a *de minimis* source category approach for either Moderate or Serious areas would allow the state to ignore a set of control measures that later in the control measure evaluation process could be determined to provide for a more expeditious attainment date. They believe that allowing the exemption of *de minimis* source categories would undermine any analysis to evaluate whether a collection of measures could advance the attainment date by a year. For example, it would be possible for a state to identify multiple *de minimis* source categories at the beginning of the process, and then after all potential control measures are identified, the state and the EPA would be unable to determine whether the collective reductions and air quality impact of the exempted categories could actually be sufficient to advance the attainment date. Other commenters noted that providing a source category exemption in one nonattainment area would lead to inconsistent treatment within a state or across states because it would give the exempted companies a competitive advantage over the same types of sources in other areas.

A number of commenters supported the *de minimis* source category concept because they believed it could result in a reduced burden in the control measure evaluation stage and help avoid regulating sources with limited impact on $PM_{2.5}$ levels. Some commenters supported the *de minimis* concept only if controls on the source are not needed for expeditious attainment. Some commenters suggested that the EPA include an emissions-based threshold (*e.g.* tons per day) rather than an air quality based threshold to reduce potential analytical burden associated with *de minimis* source category analyses. However, in their comments they did not address the fact that the air quality impact of a specific tons per day rate could vary greatly from one pollutant to another within a particular nonattainment area, or across different nonattainment areas. One state commenter noted that the NAICS system does not provide categories for nonpoint sources, and that this issue would need to be addressed if the NAICS approach were to be included in the final rule. Other commenters suggested that the rule not have a *de minimis* threshold at all but include the ability for the state to propose *de minimis* source categories to the EPA on a case-by-case basis.

After taking the range of comments on the *de minimis* source category concept into consideration, the EPA has decided to not finalize a *de minimis* source category approach for the purposes of implementing the $PM_{2.5}$ NAAQS. The EPA is persuaded by commenters who argued it is not necessary, and believes that without this concept the final rule will nevertheless provide sufficient flexibility in the Serious area control measure analysis and attainment demonstration process, due to the availability of provisions enabling states to identify sources that should not be subject to control measures, including the ability to develop precursor demonstrations to exclude certain precursors from control requirements, and to consider case-specific factors in determining technical and economic feasibility of potential control measures. If the final rule were to include an explicit step to conduct a *de minimis* source category analysis on the entire inventory early in the control measure identification process, the EPA believes that there is a risk that such an analysis may bring about investment of scarce time and analytical resources on analysis of categories to exclude rather than on the identification of the most beneficial control measures for reducing $PM_{2.5}$ and its precursors to achieve expeditious attainment of the standard. In addition, the EPA finds merit in comments suggesting that an upfront exemption of multiple *de minimis* source categories in an area would undermine the ability of the state (or other interested parties) to evaluate, after the identification of potential control measures, whether the area could advance the attainment date in order to attain "as expeditiously as practicable."

Moreover, as noted in Section IV.D of this preamble on Moderate areas, the EPA also finds that from a technical perspective, it would be very challenging to implement a *de minimis* source category process in a consistent manner nationally without clear guidelines describing how narrowly or how broadly a *de minimis* exemption could apply to a "source category," or how the technical analysis would need to be performed. For example, should a source category consist of all industrial boilers? Or all industrial boilers that burn a particular fuel? Or all industrial boilers that burn a particular fuel and are within a specific size range? The NAICS codes do not provide an appropriately comprehensive approach for defining source categories for all stationary, mobile, and area sources for this purpose. It has been noted that a *de minimis* source category exemption process is described in the 1994 PM_{10} NAAQS implementation guidance (the Serious Area Addendum). In PM_{10} areas, however, it may have been relatively straightforward to identify what were the predominant source categories contributing to the NAAQS violations (such as direct $PM_{2.5}$ emissions from dust or wood smoke), and therefore to be able to identify what categories might be considered as not predominant contributors (or *de minimis*). However, implementation of the $PM_{2.5}$ NAAQS presents much more complex challenges. Precursors and their contribution to secondarily formed PM play a much greater role in $PM_{2.5}$ nonattainment areas than in PM_{10} nonattainment areas. In addition, the relative impact of each precursor to local $PM_{2.5}$ concentrations varies from area to area, and even within sections of the same area. To appropriately implement an approach allowing for *de minimis* source category impacts, the EPA believes that a nationally consistent source category definition would be needed, along with sophisticated air quality modeling to evaluate the relative impacts of precursors emitted from different "source categories." The resources needed to conduct such analyses could be substantial, and would ultimately not help identify what control measures would be needed to solve the air quality problem. For all of these reasons, a *de minimis* source category concept is not included in the final rule for Serious areas.

iv. Additional Feasible Measures

While the proposed approaches and criteria for identifying appropriate control measures for a Serious area are necessarily different than for a Moderate area, it is important to note two similarities: First, that the EPA interprets the requirement under CAA section 172(c)(6) for a state to adopt "other measures" needed for attainment to apply to sources located inside and outside of any $PM_{2.5}$ nonattainment area (but within the state's boundaries), whether the area is classified as Moderate or Serious; and second, similar to the RACM requirement for Moderate nonattainment areas under subpart 4, CAA section 189(b)(1)(B) requires that BACM must be implemented no later than 4 years after a Moderate area is reclassified to Serious.

Taking these two statutory provisions together, the EPA proposed that the other measures required under CAA section 172(c)(6) must include "additional feasible measures," which would be those measures and technologies that otherwise meet the criteria for BACM/BACT but that can only be implemented in whole or in part beginning 4 years after reclassification of an area, but no later than the statutory attainment date for the area. *See* proposed 40 CFR 51.1000.

Some commenters agreed that an area must also consider adopting control measures that cannot be implemented within the 4-year deadline for implementation of BACM and BACT. Some commenters suggested that additional feasible measures should only be tied to expeditious attainment.

In the final rule, additional feasible measures would necessarily be implemented by sources in the nonattainment area, and a state is required to implement them if they are needed in addition to BACM and BACT to bring the area into expeditious attainment. The state must also adopt other emission reduction measures for sources within the state but outside the nonattainment area if such measures in conjunction with other control measures would enable the area to attain the standard by the attainment date, or enable the area to advance the attainment date by at least 1 year.

These "additional feasible measures" would be analogous to the "additional reasonable measures" in the RACM and RACT analysis process, which are technologically and economically feasible measures that cannot qualify as RACM or RACT because they cannot be implemented within 4 years of designation of a Moderate nonattainment area. Under the approach for determining BACM and BACT for sources in a Serious nonattainment area described later in this section, a state would identify additional feasible measures as part of the BACM and BACT determination process, just as additional reasonable measures would be identified as part of the state's RACM and RACT determination process.

The EPA recognizes that with regard to Serious areas, only a nonattainment area that is reclassified under the agency's discretionary authority might have sufficient time between the date for implementing BACM and BACT and the statutory Serious area attainment date to implement additional measures beyond BACM and BACT. BACM and BACT must be implemented no later than 4 years after reclassification of the area; areas reclassified to Serious because they cannot practicably attain the relevant NAAQS by the applicable attainment date could potentially have significantly more than 4 years between the date of reclassification and the statutory Serious area attainment date, during which time the area could continue to implement additional feasible measures to bring the area into attainment.

By way of illustration, for areas designated in the first round of designations for the 2012 $PM_{2.5}$ NAAQS, the statutory Moderate area attainment date will be no later than December 31, 2021. If a state submits a Moderate area attainment plan by the statutory attainment plan due date (18 months after designation, or in this example, October 2016) and the plan demonstrates that the area cannot practicably attain the NAAQS by December 31, 2021, then the EPA has a statutory duty to reclassify such an area within 18 months of the attainment plan due date (*i.e.*, by April 2018). The statutory Serious area attainment date would be the end of the tenth year following designation, or December 31, 2025. In such a case, the state would need to implement BACM for the area within 4 years of reclassification, or by April 2022, leaving over 3.5 years between the statutory deadline for implementing BACM and the statutory attainment date for the area. The requirement for the state to identify and adopt additional feasible measures for the area would mean that the state would need to identify those control measures and technologies that are feasible (according to the proposed BACM and BACT criteria described later in this section) and that can be implemented between April 2022 and December 2025. The EPA expects that while such a long span of time may be available only to a very few Serious nonattainment areas, it would be appropriate to require such areas to implement measures in addition to BACM and BACT if, taken together, they can provide for attainment by the attainment date or advance the attainment date for the area by at least 1 year. Accordingly the EPA has codified a definition of "additional feasible measures" and specified the conditions under which such measures would need to be included in a serious area plan submission. *See* 40 CFR 51.1000 and 40 CFR 51.1010(a)(4)(ii).

v. Steps of the BACM/BACT Selection Process

In addition to the regulatory decisions earlier, the EPA summarized and sought comment on further guidance for states to follow in selecting BACM/BACT. The guidance was primarily derived from the Addendum. This section reviews that guidance, clarifies and updates it for purposes of $PM_{2.5}$, and responds to significant comments on the guidance discussion included in the proposal.

The BACM/BACT selection process for implementation of the $PM_{2.5}$ NAAQS is designed to take into account the local facts and circumstances and the nature of the air pollution problem in a given nonattainment area. The following sections describe the steps of the process, including: (i) Develop a comprehensive inventory of sources and source categories of directly emitted $PM_{2.5}$ and $PM_{2.5}$ precursors; (ii) identify existing and potential control measures for the sources in the inventory; (iii) evaluate the technological feasibility of potential control measures; (iv) evaluate the economic feasibility of potential control measures; and (v) determine the earliest date by which a control measure or technology can be implemented in whole or in part.[164] These steps are described more fully in the following subsections.

Step 1: Develop a comprehensive inventory of sources and source categories of directly emitted $PM_{2.5}$ and $PM_{2.5}$ precursors. As with any control strategy analysis for a nonattainment area, the EPA recommends that the state begin with a current detailed emissions inventory of the various sources that emit direct $PM_{2.5}$ and $PM_{2.5}$ precursors in the Serious area. The inventory should identify major stationary sources (*i.e.,* sources with the potential to emit 70 tpy of direct $PM_{2.5}$ or any precursor), nonmajor stationary sources, mobile sources, and area sources. The inventory also should identify both anthropogenic and nonanthropogenic emissions sources.[165] The EPA expects the state to start with the base year emissions inventory submitted with the Moderate area attainment plan as required under CAA section 172(c)(3), and update it as necessary to reflect new source construction, facility shutdowns, growth in certain source categories, and any other relevant changes. This inventory should be the most comprehensive and accurate inventory available, and it should be consistent with the emissions inventory requirements for Serious area plans as described in Section VI.B of this preamble.

Step 2: Identify potential control measures. The state should identify potential control measures for all sources and source categories in the latest base year emission inventory for the nonattainment area. The list of existing and potential control measures should include options not previously considered as RACM/RACT for the area, as well as additional measures not previously evaluated in the RACM/RACT analysis. For purposes of identifying new measures to consider in its BACM/BACT analysis, the EPA recommends that the state obtain and evaluate a wide range of sources of information on existing and potential control measures. Other nonattainment areas in the same state, and other states across the country are important sources of information about control measures that are currently being implemented. Regional planning organizations, and state and local air quality consortiums have in the past developed summaries of control measures that should provide useful information for this process.[166]

The EPA's RBLC provides a central data base of air pollution technology information that may be highly relevant to states seeking information on stationary source control technology that may qualify as BACT for $PM_{2.5}$ NAAQS implementation, and is available online at *http://cfpub.epa.gov/RBLC/*. There are also other resources available to assist states in identifying other potential control measures and control technologies for their BACM and BACT determinations. The EPA encourages states with Serious $PM_{2.5}$ nonattainment areas to visit the agency's Web site to find links to other online sources of information on potential control measures for states to consider.[167]

The state must incorporate appropriate measures into the list of potential control measures for the source categories in the Serious nonattainment area. The EPA would expect the state to identify an array of existing and potential new measures at least as broad as the list identified for the same area as part of the RACM and RACT analysis, in order to ensure that the state has a sufficiently expansive and comprehensive set of potential measures to evaluate. The list of potential measures must include all measures identified as potential control measures for the nonattainment area when it was classified as Moderate or, for a given source category, one or more alternative control measures that would control emissions even more stringently than the measures included in the RACM/RACT analysis. In this way, the state will begin its BACM/BACT determination with a list of potential control options that is as complete and up-to-date as possible.

Step 3: Determine whether an available control measure or technology is technologically feasible. After developing a list of existing and potential new measures to evaluate for BACM and BACT, the state would then need to determine the technological feasibility of each identified control measure in light of a number of considerations, including each measure's individual energy and environmental impacts.[168]

(1) Stationary sources. As described under the technological feasibility criteria for the control measures analysis for Moderate area attainment plans in Section IV.D of this preamble, the EPA's prior guidance on factors to consider for judging whether a particular control technology is technologically feasible should include a source's processes and operating procedures, raw materials, physical plant layout and potential environmental impacts such as increased water pollution, waste disposal and energy requirements. For example, the EPA recognizes that the process, operating procedures and raw materials used by a source can affect the feasibility of implementing process changes that reduce emissions and can also affect the selection of add-on emission control equipment. The feasibility of modifying processes or applying control equipment also can be influenced by the physical layout of the particular plant, if the physical space available in which to implement such changes limits the choices.[169]

(2) Area and mobile sources. With respect to determining whether a given control measure might not be technologically feasible as BACM for an area or mobile source, a state may consider factors in conducting its analysis that are similar to factors the state may have considered during the RACM and RACT determination process, such as local circumstances, the condition and extent of needed infrastructure, or population size or workforce type and habits, which may

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[164] For additional information, *see ibid.* at 42012–13.

[165] Addendum to the General Preamble, 59 FR 41998 (August 16, 1994), at page 42012.

[166] Add cite to 2006 STAPPA ALAPCO document and other control measure summaries. Add cite to menu of measures. Specific to potential control measures for mobile source emissions, the EPA's past guidance has indicated that where mobile sources contribute significantly to $PM_{2.5}$ violations, "the state must, at a minimum, address the transportation control measures listed in CAA section 108(f) to determine whether such measures are achievable in the area considering energy, environmental and economic impacts and other costs."

[167] Links are provided to a number of national, state and local air quality agency sites from the EPA's $PM_{2.5}$ Web site: *http://www3.epa.gov/pm/measures.html.*

[168] *Ibid.* at 42012.

[169] *Ibid.* at 42013.

prohibit certain potential control measures from being implementable. However, in the instance where a given control measure has been applied in another NAAQS nonattainment area (for $PM_{2.5}$ or other pollutant), the state will need to provide a detailed justification for rejecting any potential BACM measure as technologically infeasible. Furthermore, if the state identifies a certain control measure for area or mobile sources that has been implemented in another nonattainment area and may qualify as BACM or BACT, the state must provide a reasoned justification if it deems it technologically infeasible to implement the same control measure to the same extent or magnitude as it was applied in the other nonattainment area.

Step 4: Determine whether an available control technology or measure is economically feasible. The fourth step of this process is to evaluate the costs of implementing each of the technologically feasible control measures and technologies in order to eliminate from further consideration any measures determined to be economically infeasible. In assessing "best" control measures and technologies, states with Serious $PM_{2.5}$ nonattainment areas must identify a control strategy for the area that overall is more stringent than that identified for the area when the state considered only the "reasonableness" of potential control measures for purposes of the RACM/RACT analysis. States need to consider emission reduction measures with higher costs per ton when assessing the economic feasibility of BACM and BACT controls (and, where applicable, additional feasible measures) as compared to the economic feasibility criteria applied in their RACM and RACT analysis (and analysis for additional reasonable measures) for the same nonattainment area.

Indeed, consistent with prior guidance on evaluating costs of a potential BACM/BACT, the EPA maintains that while the economic feasibility of a control measure is as important as its technological feasibility under the RACM and RACT determination process, economic feasibility is a less significant factor in the BACM and BACT determination process. In other words, a state must apply a higher standard for eliminating a technologically feasible control measure from further consideration as BACM due to cost alone.

In the Addendum, the EPA stated that "for PM_{10} BACM purposes, it is reasonable for similar sources to bear similar costs of emission reduction."[170] Additionally, the EPA indicated that "economic feasibility for PM_{10} BACM purposes should focus upon evidence that the control technology in question has previously been implemented at other sources in a similar source category without unreasonable economic impacts."[171] Thus, a state may not eliminate a particular control measure from further consideration as potential BACM if similar sources have successfully implemented such a measure. That is, a state must at a minimum continue to consider as potential BACM any technologically feasible control measures or technologies implemented by similar sources.

In addition, a state may not automatically eliminate a particular control measure merely because other sources have not implemented the measure. In other words, a state must continue to consider technologically feasible measures that have not been implemented by similar sources but that can nonetheless effectively reduce emissions from the source category in question at a cost that is not cost prohibitive.

As with the EPA's approach for evaluating economic feasibility of potential reasonable measures for Moderate area attainment plans, for each technologically feasible control measure or technology, a state must evaluate the economic feasibility of the measure through consideration of the capital costs, operating and maintenance costs, and cost effectiveness (*i.e.,* cost per ton of pollutant reduced by that measure or technology) associated with such measure or control. While the EPA is not establishing a fixed dollar per ton cost threshold for economic feasibility of controls identified as potential BACM and BACT, the cost per ton of an acceptable measure for the BACM and BACT analysis generally would be higher than it was for the RACM and RACT analysis for the same nonattainment area. In addition, if a source contends that a source-specific control level should not be established because the source cannot afford the control measure or technology that is demonstrated to be economically feasible for purposes of BACM for other sources in its source category, the source should make its claim known to the state and support the claim with information regarding the impact of imposing the identified control measure or technology on the following financial indicators,[172] to the extent applicable:

1. Fixed and variable production costs ($/unit);
2. Product supply and demand elasticity;
3. Product prices (cost absorption vs. cost pass-through);
4. Expected costs incurred by competitors;
5. Company profits;
6. Employment costs;
7. Other costs (*e.g.,* for BACM implemented by public sector entities).

Step 5: Determine the earliest date by which a control measure or technology can be implemented in whole or in part. Section 189(b)(1)(B) of the CAA requires that Serious area attainment plans provide for the implementation of BACM no later than 4 years after reclassification of the area to Serious. As with the EPA's proposed approach to RACM and RACT, the EPA proposes the term "implement" to mean that the control measure or technology has not only been adopted into the SIP for the area but has also been built, installed and/or otherwise physically manifested and the affected sources are required to comply. The EPA thus expects a state with a Serious nonattainment area to take timely action to implement BACM and BACT in the area.

A state must identify those technologically and economically feasible control measures and technologies that it can implement fully or partially within 4 years of reclassification of its Serious $PM_{2.5}$ nonattainment area. These measures will be considered BACM and BACT for the area. If a state evaluates a potential BACM or BACT measure and determines that it can be implemented only partially within 4 years after reclassification, the state must adopt the partial measure as BACM.

Where the earliest date that a measure can be implemented is beyond the 4 year mark following reclassification to Serious, the measure may still be needed as an "additional feasible measure" if the 4 year mark occurs before the Serious area attainment date. "Additional feasible measures" would be "best"-level, feasible measures that a state could implement in whole or in part on sources in the area sometime after the fourth year following reclassification and prior to the statutory attainment date for the area.

c. Comments and Responses. Any additional comments received on this section are addressed in the Response to

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[170] *Ibid.*

[171] *Ibid.*

[172] These longstanding factors were established in the EPA guidance in 1992 and are applicable to implementation programs for all of the NAAQS pollutants. *See* the appendices to the General Preamble, 57 FR 18070 (April 28, 1992).

Comments document found in the docket for this action.

3. BACM and BACT Submission Requirements

a. Summary of Proposal. The proposal further specified the submission requirements once a state has determined the BACT/BACM requirements in its plan. The proposal required the state to submit a list of emissions sources, an emissions inventory for such sources, and several pieces of information regarding potential control measures for these sources.

b. Final Rule. The final rule remains relatively unchanged from the proposal. To ensure that attainment plan submissions contain the necessary supporting information for EPA review and approval of the state's selected BACM and BACT and additional feasible measures as applicable, 40 CFR 51.1010(a)(1)–(5) require the state to submit the following information as part of its Serious area attainment plan submission:

(1) A list of all emissions source categories, sources and activities in the nonattainment area that emit direct $PM_{2.5}$ or any $PM_{2.5}$ precursor (for multi-state nonattainment areas, this would include source categories, sources and activities from all states which make up the area);

(2) For each source category, source or activity in the nonattainment area, an inventory of direct $PM_{2.5}$ and all $PM_{2.5}$ precursor emissions;

(3) For each source category, source or activity in the nonattainment area, a comprehensive list of potential control measures considered by the state for the nonattainment area;[173] [174]

(4) For each potential control measure considered by the state but eliminated from further consideration due to a determination by the state that the control measure or technology was not technologically feasible, a narrative explanation and quantitative or qualitative supporting documentation to justify the state's conclusion;

(5) For each technologically feasible emission control measure or technology, the state must provide the following information relevant to economic feasibility: (i) The control efficiency by pollutant; (ii) the possible emissions reductions by pollutant; (iii) the estimated cost per ton of pollutant reduced; and, (iv) a determination of whether the measure is economically feasible, with narrative explanation and quantitative supporting documentation to justify the state's conclusion;

(6) For each technologically and economically feasible emission control measure or technology, the date by which the technology or measure can be implemented.

As with a Moderate area attainment plan submission, the EPA recognizes that the base year emissions inventory that the state submits for the area in conjunction with its Serious area attainment plan will likely contain the information required under the first two items in this list. However, the EPA believes that it is incumbent on the state to ensure that the information needed for the EPA to evaluate the state's BACM and BACT and additional feasible measures analysis is presented as part of that analysis and in a format that provides transparency, consistency and the ability for another party to evaluate the state's analysis effectively and to duplicate the state's results. For this reason, the EPA is requiring the state to include the base year emissions inventory information with the BACM and BACT submission and as one element of the state's attainment plan due 18 months after reclassification of the area to Serious.

c. Comments and Responses. Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

4. Criteria for Effective Regulations to Implement BACM and BACT and Additional Feasible Measures

a. Summary of Proposal. The proposal described the four main criteria for effective control measure regulations: such regulations must be quantifiable, enforceable, replicable, and accountable.

b. Final Rule. Guidance on effective control measure regulations is provided in the control strategy discussion for Moderate areas. *See* section IV.D.9 of this preamble, criteria for effective regulations to implement RACM and RACT and additional reasonable measures.

5. Relevance of Prior BACT, LAER and BART Determinations

a. Summary of Proposal. The preamble of the proposed rule stated that it should not be assumed that past control technology determinations would automatically be deemed to meet the Serious area control measure requirements (BACM, BACT, or additional feasible measures) for an area.

b. Final Rule. The guidance on this issue in the preamble to the final rule remains largely unchanged. The EPA believes that BACT or lowest achievable emission rate (LAER) provisions for new sources (as distinct from BACT for existing sources), or best available retrofit technology (BART) for existing sources, could potentially qualify as BACM or BACT for purposes of meeting the Serious area attainment plan requirements. However, the EPA does not believe it is appropriate for a state to assume that just because a certain control technology was determined to meet BACT, LAER, or BART criteria for a new source sometime in the past, that such a control will also automatically meet the criteria for BACM or BACT or additional feasible measures for attainment planning purposes because the regulated pollutant or source applicability may differ and the analyses may be conducted many years apart. Thus, a state may not simply rely on prior BACT, LAER or BART analyses for the purposes of showing that a source has also met BACT for the relevant $PM_{2.5}$ NAAQS. Rather, the EPA expects that in Step 2 of the BACM and BACT determination process, the state would identify such measures as "existing measures" that should be further evaluated as potential BACM or BACT or additional feasible measures. At the same time, the EPA notes that the presence of previously installed control technology, and the technical and economic considerations that would be associated with upgrading to a measure that achieves greater reductions, is something that should be considered in the assessments of technological and economic feasibility of the newer measure.

c. Comments and Responses. Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

6. Multi-state Nonattainment Areas

a. Summary of Proposal. The preamble to the proposed rule provided general guidance on coordination between states in multi-state nonattainment areas to ensure they adopt sufficient BACM/BACT and additional feasible measures to ensure expeditious attainment of the standard.

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[173] The EPA believes that it is not necessary to identify every possible variation of every type of control measure, or all possible combinations of technologies and measures that would apply to a given source or activity, as long as the state has properly characterized the potentially available emissions reductions and their costs. For example, the EPA believes that the state can conduct a thorough analysis of VMT reduction measures without including every possible level or stringency of implementation of certain possible measures or combinations of measures for reducing VMT, so long as those measures would not affect the overall assessment of VMT reduction capabilities and the associated costs.

[174] The Menu of Control Measures document is available at: *http://www3.epa.gov/ttn/naaqs/pdfs/MenuOfControlMeasures.pdf.*

b. Final Rule. The guidance in the final rule remains largely unchanged. States that share a multi-state Serious $PM_{2.5}$ nonattainment area must consult with one another on BACM and BACT and additional feasible measures that will be required for the nonattainment area in the different states. This requirement would be consistent with the overall requirements for BACM and BACT and additional feasible measures determinations, as all states with Serious areas need to consider implementing BACM and BACT-level measures that have been implemented in other states, even if those measures incur higher costs. The EPA anticipates that states may potentially adopt controls that differ from state to state, based upon each state's determination of what qualifies as "best" given the mixture of sources and potential controls in the state portions of relevant nonattainment areas, subject to EPA approval. If the state can adequately demonstrate that its chosen BACM and BACT and additional feasible measures fully meet the EPA's proposed criteria for such measures, then the agency may consider approving individual state plans that differ in implementation of control measures.

c. Comments and Responses. Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

7. Environmental Justice Considerations for Developing the Attainment Plan Control Strategy for a Serious $PM_{2.5}$ Nonattainment Area

a. Summary of Proposal. The proposal provided general guidance for ensuring that overburdened populations are appropriately protected.

b. Final Rule. The guidance in the final rule remains largely unchanged. The EPA strongly urges states to consider the environmental justice aspects of any control measures they have identified as BACM and BACT or additional feasible measures in order to provide health protection for overburdened populations. Please *see* Section XI of this preamble, which discusses possible approaches for states to address environmental justice concerns associated with implementation of the $PM_{2.5}$ NAAQS in their SIP development process and attainment plans.

c. Comments and Responses. Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

E. Modeling for Attainment Demonstrations

1. Due Dates for Submission of Serious Area Attainment Demonstrations

a. Summary of Proposal. Section IV.E of this preamble describes the EPA's attainment demonstration and modeling requirements for Moderate area plans. The EPA proposed that the same general attainment demonstration and modeling requirements for Moderate area plans should apply to Serious area attainment demonstrations. However, Serious area plans have additional statutory requirements.

Attainment demonstrations are due 18 months after reclassification if the EPA reclassifies the area to Serious after failure of the area to attain the applicable Moderate area deadline. Alternatively, CAA section 189(b)(2) requires states with designated Serious nonattainment areas to submit attainment demonstrations no later than 4 years after reclassification of the area to Serious if the reclassification occurs before the Moderate area attainment deadline. The EPA proposed an approach for determining an appropriate attainment plan control strategy for a Serious $PM_{2.5}$ nonattainment area that requires the state to submit the attainment demonstration for the area within 18 months after reclassification, regardless of when or the authority under which an area was reclassified to Serious.

b. Final Rule. The statutory attainment demonstration provisions for Serious areas are as follows: Section 189(b) of the CAA requires a state with a designated Serious nonattainment area to submit an attainment plan for such area. As discussed earlier, CAA section 189(b)(1)(A) more specifically requires the state to submit an attainment demonstration including air quality modeling to establish either: (i) That the area will attain the relevant NAAQS by the applicable attainment date, or (ii) if the state is seeking an extension of the attainment date, that it is impracticable for the area to attain the relevant NAAQS by the statutory Serious area attainment date. For Serious nonattainment areas, the attainment date is as expeditiously as practicable, but no later than the end of the tenth calendar year after designation as nonattainment. A demonstration that shows that it is impracticable for the area to attain within this timeframe must also provide for attainment of the NAAQS by the most expeditious alternative date practicable, but no later than 5 years after the maximum statutory Serious area attainment date (based on the criteria specified in CAA section 188(e)).

The EPA is not finalizing the proposed approach of requiring all Serious area attainment demonstrations to be due 18 months after reclassification. If the EPA reclassifies the area to Serious after failure of the area to attain the applicable Moderate area deadline, the attainment demonstration will be due in 18 months. States with Serious nonattainment areas that were reclassified before the Moderate area attainment deadline must submit attainment demonstrations the earlier of 4 years after reclassification of the area to Serious or the end of the eighth calendar year after initial designation. However, these areas are still required to submit BACT/BACM measures within 18 months of being reclassified as Serious. Sections VI.A and VI.D of this preamble describe more fully the EPA's approach for plan due dates and control strategy analyses for all elements of a Serious area attainment plan. Section VI.J of this preamble provides a complete discussion of the EPA's criteria for granting a Serious area attainment date extension.

c. Comments and Responses. Any comments received on this section are addressed in the Response to Comments document found in the docket for this action.

2. Attainment Demonstration Requirements for Serious Areas

a. Summary of Proposal. The proposal described the attainment demonstration and impracticability demonstration requirements for Serious nonattainment areas. The EPA proposed that a serious area plan must include an attainment demonstration that demonstrates how a state will attain the $PM_{2.5}$ NAAQS by the applicable attainment date, must include analyses supporting the state's determination of its proposed attainment date, and must show that the area will attain the NAAQS as expeditiously as practicable, but not later than the tenth calendar year after designation. The proposal indicated that in order to establish that the attainment date is as expeditious as practicable, the state must explain why the control measures adopted in the attainment plan provide for the most expeditious attainment and must include all BACM and BACT controls in the analysis.

b. Final Rule. The final rule requirements for Serious area attainment demonstrations are generally unchanged from the proposal. As described in Section IV.E of this preamble, an attainment demonstration is a plan that demonstrates how a state will attain the $PM_{2.5}$ NAAQS by the applicable attainment date. The EPA is finalizing a requirement that the demonstration for Serious areas must consist of: (i) Technical analyses such as base year and future year modeling of emissions which identify sources and quantify emissions that are contributing to violations of the $PM_{2.5}$ NAAQS; and, (ii) analyses of future year projected emissions reductions and air quality improvement resulting from existing (*i.e.* already-adopted or "on the books") national, regional and local programs, and potential new local measures needed for attainment, including RACM and RACT and BACM and BACT controls for the area, as well as other measures either inside the nonattainment area or outside the nonattainment area but within the state that could potentially accelerate attainment. Each state with a Serious nonattainment area must submit an attainment plan with an attainment demonstration that includes analyses supporting the state's determination of its proposed attainment date. In all cases, the state must show that the area will attain the NAAQS as expeditiously as practicable, but not later than the tenth calendar year after designation. In order to establish that the attainment date is as expeditious as practicable, the state must explain why the control measures adopted in the attainment plan provide for the most expeditious attainment and must include all BACM and BACT controls in the analysis.

A state with a Serious nonattainment area can also submit an impracticability demonstration (under CAA section 189(b)(1)(A)(ii)) as part of seeking an extension of the attainment date under CAA section 188(e). The impracticability demonstration for a Serious area would be similar to an impracticability demonstration for Moderate areas because it must show that the area will not be able to attain the $PM_{2.5}$ NAAQS by the latest possible statutory attainment date, which in this case is by the end of the tenth calendar year following designation.

In order to support a Serious area impracticability demonstration, the state must show (through modeling) that attainment cannot be reached by the latest statutory Serious area attainment date, even if all RACM and RACT and BACM and BACT controls, as well as other measures either inside the nonattainment area or outside the nonattainment area but within the state (as may be necessary to meet the requirements of 172(c)(6)), were implemented before the attainment date. Moreover, in addition to the Serious area impracticability demonstration, to support an extension of the attainment date, the Serious area plan must demonstrate (again, using air quality modeling) that it provides for attainment by the most expeditious alternative date practicable employing MSM, as specified in CAA section 188(e). (MSM are discussed in more detail in Section VI.J of this preamble). As a result, the required plan in the case of a Serious area that cannot attain by the statutory attainment date is both an impracticability demonstration (to justify an extension beyond the statutory attainment date) and an attainment demonstration that serves as the basis for proposing an appropriate alternative attainment date. Note that this is different from a Moderate area impracticability demonstration, which is not required to serve as the basis for proposing a new area attainment date.

c. Comments and Responses. Any comments received on this section are addressed in the Response to Comments document found in the docket for this action.

3. Air Quality Modeling Required for Serious Area Attainment Demonstrations and Impracticability Demonstrations

a. Summary of Proposal. The EPA proposed to require air quality modeling in support of both a Serious area attainment demonstration and a Serious area impracticability demonstration.

b. Final Rule. The EPA is finalizing a requirement for states to submit air quality modeling in support of both attainment demonstrations and impracticability demonstrations for Serious $PM_{2.5}$ nonattainment areas. Unlike the impracticability demonstration for Moderate areas described in CAA section 189(a)(1)(B)(ii), the impracticability demonstration for Serious areas in CAA section 189(b)(1)(A)(ii) also requires air quality modeling establishing the most expeditious alternative attainment date practicable. Therefore, air quality modeling is a required element in all attainment demonstrations for Serious areas.

Some commenters believed that both Moderate and Serious area impracticability demonstrations must include air quality modeling. The EPA does not agree and believes the statute only requires air quality modeling for Serious area impracticability demonstrations. This stems from the slightly different statutory construction in CAA section 189(b)(1)(A) compared to CAA section 189(a)(1)(B). Section 189(b)(1)(A) of the CAA specifies an air quality modeling requirement as a parenthetical, which the EPA interprets to apply to both the requirements in CAA section 189(b)(1)(A)(i) [attainment demonstrations] and CAA section 189(b)(1)(A)(ii) [impracticability demonstrations]. Additionally, the fact that a Serious area impracticability demonstration must also include an attainment demonstration with an alternative attainment date logically supports the final rule conclusion that a Serious area impracticability demonstration must include air quality modeling. Modeling is needed to demonstrate attainment and to propose an alternative attainment date for the Serious area. This differs from a Moderate area impracticability demonstration, which only serves to demonstrate that attainment cannot be reached by the Moderate area attainment date. A Moderate area impracticability demonstration does not require a demonstration of attainment or setting of an alternative future attainment date. It merely starts the process of reclassifying an area to Serious and the eventual required submission of a Serious area implementation plan.

Other than the timing of plan submissions and additional required elements of a Serious area plan (such as BACM and BACT), the relevant air quality modeling procedures and guidance for Moderate and Serious area plans are the same. *See* Section IV.E of this preamble for more details on the modeling requirements and guidance for all $PM_{2.5}$ nonattainment areas.

c. Comments and Responses. Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

4. Attainment Demonstrations Required To Be Submitted by an Area Reclassified to Serious

a. Summary of Proposal. The proposal discussed the attainment demonstration requirements for Moderate nonattainment areas that subsequently are reclassified to Serious nonattainment. The EPA proposed that states with Moderate nonattainment areas that get reclassified to Serious nonattainment areas must first submit a Moderate area plan and then a separate Serious area plan.

b. Final Rule. The EPA is finalizing requirements for states to submit a Moderate area attainment demonstration (or impracticability demonstration) and then if reclassified to Serious nonattainment, a separate Serious area attainment demonstration. Under CAA section 189(a)(1)(B), a state with a

Moderate nonattainment area is required to submit a demonstration that the area either will attain or cannot practicably attain the NAAQS by the statutory attainment date. Regardless of whether the state submits an attainment demonstration or an impracticability demonstration for a Moderate area, if such an area is reclassified to Serious prior to or after failing to attain the applicable NAAQS, the state is required under CAA section 189(b)(1)(A) to submit a new attainment demonstration as part of an area's Serious area attainment plan. The separate statutory requirements for Moderate and Serious nonattainment areas anticipate two separate attainment plan submissions, and the EPA's existing guidance in the General Preamble and Addendum further support this expectation. While the state is required to submit a separate Serious area attainment plan, the EPA anticipates that certain control strategies may build upon those previously adopted and implemented as part of the Moderate area plan. For example, an area dominated by wood smoke emissions may not attain the standard by the statutory Moderate area attainment date because all necessary woodstove change-outs could not occur in that timeframe, but additional woodstove change-outs could occur by the statutory Serious area attainment date.

c. Comments and Responses

Comment: Some commenters agreed with the EPA that areas seeking to be reclassified from moderate to serious must submit two separate attainment plan submissions. The commenter stated the Act promises that all areas, even the most polluted, will implement reasonably available controls and provide at least some interim health protections while preparing a serious area plan containing more protective requirements.

Response: The EPA agrees with the comment. In the final rule, an area that is reclassified to Serious must submit both Moderate and Serious area plans, and all statutory requirements for a Moderate area (including RACT and RACM) must be met by the statutory deadline.

5. Future Year(s) To Be Modeled in Attainment Demonstrations

a. Summary of proposal. A state performing a modeling analysis for an attainment demonstration or a Serious area impracticability analysis must select a future year for the analysis. The EPA proposed that for an attainment demonstration, a state should select the future modeling year such that all emissions control measures relied on for attainment will have been implemented by the beginning of that year. The EPA recommended the last year of the statutory attainment date as a starting point for Serious nonattainment area modeling demonstrations.

b. Final Rule. The EPA is finalizing a requirement that all emissions control measures relied on for attainment must have been implemented by the beginning of the attainment year. *See* 40 CFR 51.1011(b)(6). To demonstrate attainment, the modeling results for the nonattainment area must predict that emissions reductions implemented by the beginning of the last calendar year preceding the attainment date will result in $PM_{2.5}$ concentrations that meet the level of the standard.[175]

While states should choose the future modeling year based on a number of factors, the EPA recommends the last year of the statutory attainment date as a starting point for modeling for two reasons. First, a state with a Serious area for which it submits an attainment date extension request under CAA section 188(e) must show that the area cannot practicably attain the NAAQS by the end of the tenth calendar year following designation of the area. Therefore, the appropriate future modeling year for making such a demonstration is the tenth year after designations. Even if a state does not submit (or does not intend to submit) a Serious area attainment date extension request, modeling the tenth year is a logical starting point to determine if attainment by year ten is likely. If attainment-level concentrations of $PM_{2.5}$ are not expected in the tenth calendar year after designations, then the area must also, as a requirement to receive an extension of the Serious area attainment date, submit a demonstration (using air quality modeling) that provides for attainment by the most expeditious alternative date practicable, but no later than the end of the fifteenth year after designation, with the implementation of MSM (*see* Section VI.J of this preamble for details about MSM determinations).

Second, even though attainment of any $PM_{2.5}$ NAAQS is determined by averaging 3 years of ambient data, states do not have to model 2 years before the attainment date to show modeled attainment. Since the design value is an average of the annual or 98th percentile value for 3 consecutive years, attainment can still be shown even if concentrations exceed the NAAQS in one or more of the 3 years used to determine attainment (as long as the average of the three annual values is less than the NAAQS). Therefore, it is appropriate to model any of the 3 years used to determine attainment. For these reasons, it is acceptable, and may in fact be most efficient, for a state to begin the Serious area attainment demonstration process by modeling the final year of the statutory attainment date to determine future year modeled $PM_{2.5}$ concentrations in the tenth year after designations.

Because an area must attain "as expeditiously as practicable," additional considerations are necessary before an attainment date can be established. Criteria for establishment of the Serious area attainment date are discussed in Section VI.I of this preamble. In evaluating such considerations, the question arises as to whether additional future modeling is required beyond the recommended final year modeling just discussed. For purposes of determining the attainment date that is as expeditious as practicable, the state must conduct future year modeling that takes into account growth and known controls (including any controls that were previously determined to be RACM and RACT for the area). For example, for an area designated nonattainment for the 2012 $PM_{2.5}$ NAAQS in 2015 and subsequently reclassified to Serious in 2021, a future case scenario for the year 2025 (10 years after the initial nonattainment designation) would be needed to examine whether existing federal, state, and local measures (including previously identified and implemented RACT/RACM controls for the area) plus the BACM and BACT identified by the state would result in attainment. Since the EPA is finalizing the requirement that BACM and BACT must be determined independent of the attainment demonstration for the area, the future case scenario must include BACM and BACT controls in the analysis plus any additional measures on sources inside and outside of the nonattainment area (but within the state) that the state has identified as feasible to implement by the attainment date. Note that similar to RACM and RACT, BACM and BACT controls must be implemented within 4 years after reclassification to Serious nonattainment. In order to justify an extension of the attainment date beyond the end of the tenth year after designation, the state must show that attainment by that date (including the anticipated emissions reductions from

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[175] Note that for purposes of the $PM_{2.5}$ NAAQS, a determination of attainment (or failure to attain), which the EPA is required to make after the attainment date has passed, is based on ambient data from the most recent 3 years prior to the attainment date for the area.

RACM and RACT and additional reasonable measures, and BACM and BACT and additional feasible measures) would be impracticable. Any proposed attainment date after the 10 year period must include modeling of BACM and BACT controls plus the most stringent measures that are included in the implementation plan of any state and can be feasibly implemented in the area. The attainment date extension beyond 10 years can be for up to 5 additional years, but the proposed attainment date must also be shown to be as expeditious as practicable. Section VI.J of this preamble provides a complete discussion of the EPA's proposed interpretation of the statutory requirements for a Serious area attainment date extension under CAA section 188(e).

As with Moderate area attainment demonstrations, the EPA believes that it is not necessary or reasonable to require states to model each and every year to determine the appropriate attainment date for a Serious $PM_{2.5}$ nonattainment area given the resource demands associated with modeling.[176] In some cases it may be reasonable to model one additional interim year before the maximum statutory attainment date. However, in most cases, the air quality benefits of an identified set of reasonable control measures, BACM and BACT and additional feasible control measures can be estimated through model sensitivity analyses and the development of sensitivity factors (factors to relate tons of emissions reductions in the area to $PM_{2.5}$ concentration changes in the area). For example, states can model across the board percentage reductions in direct $PM_{2.5}$ and/or precursor emissions (in separate model runs or using advanced modeling techniques such as DDM) to determine the impact of emissions reductions on $PM_{2.5}$ concentrations in the area. This modeling can be performed with a single attainment year modeling platform, which is much less resource intensive than modeling multiple additional future years. The EPA strongly recommends that states discuss the selection of the future year(s) to model with their respective EPA Regional Office as part of the modeling protocol development process prior to embarking on the modeling.

c. Comments and Responses. Any comments received on this section are addressed in the Response to Comments document found in the docket for this action.

6. Attainment Year Motor Vehicle Emissions Budgets

As with Moderate areas, the transportation conformity rule requires that Serious area attainment plans establish motor vehicle emissions budgets for the area's attainment year. Therefore, once a Serious area's attainment date has been established, the state is required to establish motor vehicle emissions budgets for direct $PM_{2.5}$ and any relevant $PM_{2.5}$ precursor for the attainment year.[177] If a state's SIP submission demonstrates that a Serious area cannot attain by the end of the tenth calendar year after the area's designation, motor vehicle emissions budgets are not required for that tenth calendar year, but are required for the year that the state demonstrates to be the area's attainment year. A motor vehicle emissions budget for the purposes of a Serious area $PM_{2.5}$ attainment plan is that portion of the total allowable emissions within the nonattainment area allocated to on-road sources as defined in the submitted attainment plan.[178] Such motor vehicle emissions budgets would be calculated using the latest planning assumptions and the latest approved motor vehicle emissions model available at the time that the attainment plan is developed, unless EPA approves the state's use of an alternative model.[179]

F. RFP Requirements

1. General Approach to RFP

a. Summary of the Proposal. The EPA generally proposed that a state must submit an RFP plan as part of any attainment plan submission for a Serious nonattainment area in order to satisfy the statutory requirements for RFP, similar to a Moderate area attainment plan. The EPA proposed that the applicable baseline year must be the same year as that represented by the latest base year inventory for the Serious area. The EPA proposed that the state must include in its RFP analysis the anticipated emissions reductions expected to be achieved through the implementation of control measures required by the control strategy explained in Section VI.D of this preamble (BACM and BACT, additional feasible measures and MSM if applicable). As with RFP plans for Moderate areas, the EPA proposed that a state must submit RFP projected emissions as part of the RFP plan for any Serious $PM_{2.5}$ nonattainment area following the same guidance that applies to emissions inventories for attainment plans (*see* Section VI.B of this preamble for a complete discussion of emissions inventories for Serious area attainment plans). The EPA also proposed that motor vehicle emissions budgets must also be established for direct $PM_{2.5}$ and any $PM_{2.5}$ plan precursor using the latest planning assumptions and the latest approved motor vehicle emissions model available at the time that the Serious area attainment plan is developed.[180] It was not necessary to propose that RFP plans for Serious areas include motor vehicle emissions budgets for direct $PM_{2.5}$ and any $PM_{2.5}$ plan precursor because, as stated in the section of this rule that addresses RFP requirements for Moderate $PM_{2.5}$ areas, the transportation conformity rule already requires that RFP plans establish motor vehicle emissions budgets. RFP plans would therefore be required to establish motor vehicle emissions budgets for direct $PM_{2.5}$ and any relevant $PM_{2.5}$ plan precursor. The EPA also proposed that guidance found in the Moderate nonattainment areas RFP section of the proposal should also apply to Serious nonattainment areas.

b. Final Rule. The EPA is finalizing rule provisions for Serious areas that essentially mirror the approach to Moderate areas found in Section IV.F of this preamble. The EPA is further clarifying application of those provisions by providing guidance that closely follows the Moderate area guidance regarding how to prepare an RFP plan, RFP projected emissions, geographic coverage of emission sources for RFP, and RFP requirements for multi-state nonattainment areas.

As with a Moderate area attainment plan, the EPA is finalizing that a state must submit an RFP plan as part of any Serious area attainment plan in order to satisfy the statutory requirements for RFP. The plan must contain appropriate information to demonstrate that adequate emissions reductions will be achieved through control measures in the attainment plan in order to meet the statutory definition of RFP. The plan must include three components: (1) An implementation schedule for control measures on sources in the nonattainment area, (2) RFP projected emissions for each applicable quantitative milestone year determined in Section VI.G of this preamble, based on the anticipated control measure implementation schedule; and (3) an analysis that demonstrates that this schedule of aggregate emissions reductions achieves sufficient progress toward attainment between the applicable baseline year to the attainment year. For additional discussion of each of the components of the RFP plan, refer to Section IV.F of this preamble. *See* 40 CFR 51.1012(a).

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[176] States with Serious areas that request an attainment date extension beyond 10 years must model the tenth year after designation of the area as part of an impracticability demonstration, plus an additional year beyond that which represents the attainment date.

[177] For more information on $PM_{2.5}$ precursor requirements, *see* CAA section 93.102(b)(2)(iv) and (v) of the transportation conformity rule. *See also* the May 6, 2005, final transportation conformity rule that addressed requirements for $PM_{2.5}$ precursors. (70 FR 24280).

[178] A state would also establish motor vehicle emissions budgets for an area's attainment year. Those budgets would be the motor vehicle emissions that the SIP establishes as being necessary to attain the NAAQS.

[179] If an area includes re-entrained road dust in the motor vehicle emissions budget, the latest approved version of AP–42 should be used unless the EPA has approved an alternative model for the area.

[180] *Ibid.*

The EPA requires that the applicable baseline year must be the same year as that represented by the latest base year inventory for the Serious area. The projected attainment year may be up to the end of the tenth year following designation for a Serious area that can demonstrate attainment pursuant to CAA section 189(b)(1)(A), or up to the end of the fifteenth year following designation for a Serious area that sought an extension of the statutory attainment date pursuant to CAA section 188(e).[181] As with Moderate areas, the RFP analysis must clearly convey how the schedule for implementing the control strategy will provide for generally linear or stepwise progress towards attainment. If stepwise progress is more appropriate for the specific nonattainment area, the state is required to submit a clear rationale and supporting information to explain why generally linear progress towards attainment in the area is not appropriate (*e.g.,* due to the nature of the nonattainment problem, the types of sources contributing to $PM_{2.5}$ levels in the area, and the ability to perform timely implementation of control measures). For a Serious area, the EPA requires that the state must include in its RFP analysis the anticipated emissions reductions expected to be achieved through the implementation of control measures required by the control strategy described in Section VI.D of this preamble (BACM and BACT, additional feasible measures and MSM, if applicable). Similar to Moderate areas, the optional air quality analysis discussed in Section IV.F of this preamble is also available for use by a state preparing a Serious area RFP plan.

Additionally, the EPA requires that motor vehicle emissions budgets must also be established for direct $PM_{2.5}$ and $PM_{2.5}$ plan precursors using the latest planning assumptions and the latest approved motor vehicle emissions model available at the time that the Serious area attainment plan is developed.[182] *See* 40 CFR 51.1012(a).

Finally, similar to Moderate areas, Serious areas that are multi-state or multi-jurisdictional shall provide RFP plans for each state represented in the nonattainment area that demonstrate RFP on the basis of common multi-state inventories. The states or jurisdictions within which the area is located must provide a coordinated RFP plan. For further information, *see* Section IV.F.5 of this preamble. *See* 40 CFR 51.1012(b).

c. Comments and Responses. Any additional comments received related to RFP are addressed Section IV.F of this preamble or in the Response to Comments document found in the docket for this action.

G. Quantitative Milestones

1. Summary of the Proposal

The EPA proposed that a Serious area plan for an area that can demonstrate attainment by the statutory Serious area attainment date must also include quantitative milestones to be reached 7.5 and 10.5 years from designation, to help assess the state's progress toward attaining the $PM_{2.5}$ NAAQS in the event the area fails to attain by the applicable attainment date. For a Serious area that cannot demonstrate attainment by the statutory Serious area attainment date, the EPA proposed that the state must include in the Serious area attainment plan quantitative milestones to be achieved at 7.5, 10.5 and 13.5 years from the area's date of designation.

The EPA proposed that the general approach to selecting quantitative milestones outlined in the Moderate nonattainment area section of the proposal should apply to any attainment plan for a $PM_{2.5}$ nonattainment area, independent of its classification. Specifically, the EPA proposed that states be allowed to select the quantitative milestones that they identify as appropriate and quantifiable and that will provide for objective evaluation of progress toward attainment in their Serious $PM_{2.5}$ nonattainment area, and that the EPA, in its attainment plan approval process, will determine if they satisfy the statutory requirements of CAA section 189(c). Additionally, the EPA proposed to require that, at a minimum, states must include in all attainment plans for Serious $PM_{2.5}$ nonattainment areas a measure to confirm that some specific portion of BACM and BACT for the area has been implemented as appropriate in order to comply with the statutory requirement at CAA section 189(b)(1)(B).

2. Final Rule

The final rule provisions for Serious area quantitative milestones are similar to such provisions for Moderate areas discussed in Section IV.G of this preamble. As required for Moderate areas, Serious area attainment plans must include quantitative milestones that demonstrate RFP towards attainment to be achieved every 3 years until the area is redesignated to attainment. To account for variations in the timing of possible additional plans that may be required beyond the Serious area attainment plan (such as a plan revision under CAA section 189(d) for a Serious area that fails to attain) the EPA is also clarifying, consistent with the requirements discussed in Section IV.G of this preamble for Moderate areas, that all Serious area attainment plans must contain one additional quantitative milestone to be met in the 3-year period beyond the applicable Serious area attainment date. This will provide the EPA with appropriate tools necessary to continue to monitor the area's continued progress toward attainment in the event that the area fails to attain and develops a new attainment plan.

For an area that is discretionarily reclassified to Serious under the provisions of CAA section 188(b)(1), the Serious area plan must contain quantitative milestones to be achieved by 7.5 years from the area's date of designation as nonattainment. In this case, the 7.5 year quantitative milestone that was submitted with the Moderate area plan may still be sufficient to demonstrate RFP or may have to be adjusted to reflect the difference in actual progress from the projections of the Moderate area plan. For an area that is reclassified to Serious under CAA section 188(b)(2) due to failure to attain, the 7.5 year quantitative milestones that were submitted with the Moderate area plan are still required and would be sufficient for the EPA to evaluate the area's progress toward attaining the NAAQS while the Serious area plan is being developed. All Serious area plans must also include quantitative milestones to be achieved 10.5 years from designation, to help assess the state's progress toward attaining the

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[181] As noted in Section V.B of this preamble, depending upon when the area is reclassified from Moderate to Serious, this base year inventory may need to be more recent than the inventory submitted with the Moderate area attainment plan.

[182] If an area includes re-entrained road dust in the motor vehicle emissions budget, the latest approved version of AP–42 should be used unless the EPA has approved an alternative model for the area.

$PM_{2.5}$ NAAQS in the event the area fails to attain by the applicable attainment date. Finally, for a Serious area that cannot demonstrate attainment by the statutory Serious area attainment date, the state must include quantitative milestones to be achieved every 3 years, such that the final milestone falls within the 3 years after the applicable Serious area attainment date. For example, if a state requests an attainment date extension to 14 years after designation pursuant to CAA section 188(e), the attainment plan should contain not only the 7.5 and 10.5 year milestones, but also milestones to be achieved 13.5 and 16.5 years from designation.

The Addendum included guidance that recommended milestones "should be addressed by quantifying and comparing the annual incremental emissions reductions which result from implementation of BACM and BACT (required within 4 years after the area is reclassified as serious) and from additional measures included in the final serious area SIP to those reductions which were identified in the SIP as quantitative milestones necessary to achieve the NAAQS by the applicable attainment date."[183] The final rule does not specify that the milestones must be expressed in terms of emissions reductions. While the EPA notes that the Addendum contains this fundamental concept, it is impractical to expect that a state will always be able to quantify and compare real and projected emissions reductions, and submit a report to the EPA within 90 days of a given milestone, as required under CAA section 189(c)(2). Therefore, the final rule requires that states selecting quantitative milestones for a Serious area plan should use the approach outlined for Moderate areas, as described in Section IV.G of this preamble. This approach applies to any attainment plan for a $PM_{2.5}$ nonattainment area, independent of its classification. Specifically, the final rule requires that states be allowed to select the quantitative milestones that they identify as appropriate and quantifiable and that will provide for objective evaluation of progress toward attainment in their Serious $PM_{2.5}$ nonattainment area, and that the EPA, in its attainment plan approval process, will determine if they satisfy the statutory requirements of CAA section 189(c). *See* 40 CFR 51.1013(a)(2).

In addition to this general approach for selecting quantitative milestones and similar to what the final rule requires for Moderate area attainment plans, the final rule requires that, at a minimum, states must ensure that the quantitative milestones for Serious $PM_{2.5}$ nonattainment areas assure RFP is being met by demonstrating that BACM and BACT have been implemented, as appropriate considering the timing of the milestone report, in order to comply with the statutory requirement at CAA section 189(b)(1)(B). The agency is further finalizing a corresponding requirement for Serious $PM_{2.5}$ nonattainment areas that receive an attainment date extension. For these areas, the quantitative milestone should assure that RFP is being met by demonstrating that MSM for the area has been implemented as required pursuant to CAA section 188(e). This requirement was not specifically outlined in the proposal. However, while considering the requirements that were proposed for Serious areas, the EPA determined that including this additional provision within quantitative milestones would enable the agency to better evaluate progress toward attainment in areas that receive a Serious area extension. The EPA acknowledges that the precise quantifiable metric for a quantitative milestone (*e.g.,* 50 percent of BACM and BACT measures implemented by milestone date 7.5 years from designation) would need to be determined on a case-by-case basis, as it would depend upon the date of reclassification of the area, which quantitative milestone (*i.e.,* 7.5 or 10.5 years from designation), and the anticipated implementation timing and nature of the BACM and BACT controls themselves. Nonetheless, the EPA believes it is appropriate to include confirmation that such control measures and technologies are implemented as a metric that any state with a Serious nonattainment area must adopt as a quantitative milestone to demonstrate RFP (and thus must demonstrate compliance with when they submit their milestone report), as it derives from a statutory provision that applies to all Serious areas and thus represents a milestone that all Serious nonattainment areas must meet.

Additional provisions discussed in the Moderate area quantitative milestones requirements in Section IV.G of the preamble also apply to Serious areas. Specifically, if a Serious area submitted the optional air quality targets with the RFP plan then an air quality based milestone (*i.e.,* one that is expressed in terms of an ambient $PM_{2.5}$ level) is strongly recommended to be included in order to confirm that the air quality target has been met for the quantitative milestone year. If used, this milestone will be compared to the most recently certified monitored ambient air data as part of the milestone report due after the area reaches each quantitative milestone date. For additional details on this optional provision, refer to Section IV.G of this preamble.

Finally, the quantitative milestone report requirements outlined in Section IV.G of this preamble apply to Serious areas as well. Specifically, the requirements associated with the timing and contents of the quantitative milestone report submission for a Moderate area also requirements in a Serious area. For additional details on these requirements, refer to Section IV.G of this preamble. *See* 40 CFR 51.1013(b).

3. Comments and Responses

Any additional comments received on this section are addressed in Section IV.G of this preamble or in the Response to Comments document found in the docket for this action.

H. Contingency Measures

1. Summary of the Proposal

In the proposal, the EPA proposed that the criteria for identifying and selecting contingency measures for a Serious area attainment plan should be the same as those for Moderate area plans. The EPA also proposed that, as with Moderate areas, a state may elect to rely on contingency measures that achieve emissions reductions not only from sources within the nonattainment area, but also from sources located outside the nonattainment area but within the state, provided that the measures on sources outside the designated nonattainment area are demonstrated to produce the appropriate air quality impact within the nonattainment area. As with contingency measures for Moderate area attainment plans, the EPA proposed that the emissions reductions associated with contingency measures for Serious area plans must be equal to approximately 1 year's worth of emissions reductions necessary to achieve RFP for the area, unless the state adequately demonstrates that some smaller amount of reductions is appropriate while the state is revising its attainment plan for the area. The agency also proposed options for submission deadlines for Serious area contingency measures.

2. Final Rule

As noted in Section IV.G of this preamble, all $PM_{2.5}$ nonattainment areas must include in their attainment plans contingency measures consistent with

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[183] Addendum to the General Preamble, 59 FR 41998 (August 16, 1994), at page 42016.

CAA section 172(c)(9). Contingency measures are additional control measures to be implemented in the event that an area fails to meet RFP requirements, fails to meet any quantitative milestone, fails to submit a quantitative milestone report or fails to attain the $PM_{2.5}$ standard by the applicable attainment date. These measures must be fully adopted rules or control measures that are ready to be implemented quickly upon a determination by the EPA that a failure occurred, and such measures are required to take effect without significant further action by the state or the EPA.

The statutory contingency measure requirement at CAA section 172(c)(9) is not superseded or subsumed by any requirement under subpart 4, nor does it apply only to Moderate area attainment plans. Thus, contingency measures are required for Serious $PM_{2.5}$ nonattainment areas as part of a state's Serious area attainment plan submission. Accordingly, the final rule requires the criteria for identifying and selecting contingency measures for a Serious area attainment plan that are the same as those for Moderate area plans. Specifically, the EPA is finalizing that the following requirements must be met in order for contingency measures to be approvable as part of a state's Serious area attainment plan submission:

(1) Contingency measures must be fully adopted rules or control measures that are ready to be implemented quickly upon a determination by the Administrator of the nonattainment area's failure to meet RFP, failure to meet any quantitative milestone, failure to submit a quantitative milestone report or failure to meet the standard by the applicable attainment date.

(2) The SIP must contain trigger mechanisms for the contingency measures, specify a schedule for implementation, and indicate that the measures will be implemented without significant further action by the state or by the EPA.

(3) Contingency measures should consist of control measures that are not otherwise included in the control strategy for the SIP, or that achieve emissions reductions not otherwise relied upon in the control strategy for the area.

(4) Contingency measures should provide for emissions reductions equivalent to 1 year's share of reductions needed to demonstrate attainment (*i.e.,* the overall needed reductions divided by the number of years from the base year to the attainment year), or approximately equivalent to 1 year's worth of air quality improvement or emissions reductions proportional to the overall amount of air quality improvement or emissions reductions to be achieved by the area's attainment plan.

The EPA is also finalizing its proposal to allow a state to rely on contingency measures that achieve emissions reductions on sources located outside the nonattainment area, but within the state provided that the measures on sources outside the designated nonattainment area are demonstrated to produce the appropriate air quality impact within the nonattainment area.

As with contingency measures for Moderate nonattainment areas, the EPA allows a state under these circumstances to rely on additional reductions from federal or local measures already scheduled for implementation as part or all of their contingency measures. The EPA could consider such measures as meeting the contingency measure requirement as long as they produce emissions reductions in excess of those required to meet other statutory nonattainment provisions (such as to meet BACM/BACT requirements) and they can be relied on to achieve a sufficient portion of the actual emissions reductions necessary to reduce emissions in the area while the state develops a new plan to bring the area into attainment.[184] As with contingency measures for Moderate area attainment plans, the EPA requires that the emissions reductions associated with contingency measures for Serious area plans should be approximately equivalent to 1 year's worth of emissions reductions necessary to achieve RFP for the area, unless the state adequately demonstrates that some smaller amount of reductions is appropriate while the state is revising its attainment plan for the area. *See* 40 CFR 51.1014(b)(2).

The Addendum provided guidance related specifically to the selection and implementation of contingency measures for Serious nonattainment areas. First, the guidance indicated that "for those moderate areas reclassified as serious, if all or part of the moderate area plan contingency measures become part of the required serious area control measures (*i.e.,* BACM), then additional contingency measures must be submitted whether or not the previously submitted contingency measures had already been implemented. Further, the affected states must ensure that serious areas have adequate contingency measures considering, among other things, new information about the potential attainment shortfall for the newly reclassified serious area."[185] The EPA continues to believe that this approach to the statutory contingency measure requirement is appropriate and is finalizing it for purposes of implementing the $PM_{2.5}$ NAAQS in Serious nonattainment areas. *See* 40 CFR 51.1014.

With regard to the timing for implementing contingency measures, the EPA reiterates that the purpose of contingency measures is to ensure that corrective measures are put in place automatically at the time that the EPA makes a determination that an area has failed to meet RFP, failed to meet any quantitative milestone, failed to submit a quantitative milestone report or failed to meet the NAAQS by the applicable attainment date. For any nonattainment area, the EPA is required to determine within 90 days after receiving a state's RFP demonstration, and within 6 months after the attainment date for an area, whether the state has met their statutory obligations for demonstrating RFP or attaining the standard, as appropriate. As with Moderate areas, the EPA expects that contingency measures should become effective for Serious areas within 60 days of the EPA making its determination that the area failed to meet RFP or attain the NAAQS.

3. Comments and Responses

Comment: One commenter supported the proposal that contingency measures may be approved if they will result in the equivalent air quality improvement as would be obtained by implementing measures obtaining 1 year's worth of emissions reductions needed to demonstrate attainment.

Response: In the case where a state selected the optional RFP analysis that includes air quality targets, the EPA expects that an area contingency measures may be approved if they will result in approximately 1 year's worth of air quality improvement.

I. Attainment Dates

1. Summary of Proposal

Section 188(c) of the CAA states that the attainment date for a Serious area is to be the end of the tenth calendar year after designation. The EPA proposed to interpret the reference to "designation" in section 188(c) as meaning the "effective date of designation."

2. Final Rule

As explained earlier, section 188 establishes the attainment dates for both Moderate and Serious areas. For a

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[184] *See LEAN* v. *EPA,* 382 F.3d 575 (5th Cir. 2004).

[185] Addendum to General Preamble, 59 FR 41988 (August 16, 1994), at 42015.

Serious area, CAA section 188(c)(2) provides that "the attainment date shall be as expeditiously as practicable but no later than the end of the tenth calendar year beginning after the area's designation as nonattainment." [186] For example, for an area initially designated as a Moderate nonattainment area effective in April 2015 that is reclassified to Serious at some future date, the Serious area attainment date, absent any approved Serious area attainment date extension, would be no later than December 31, 2025 (the end of the tenth calendar year after designation). As discussed in Section IV.I of this preamble, the EPA interprets the references to "designation" in CAA section 188(c) as meaning "effective date of designation," consistent with the agency's prior approach for implementing the previous $PM_{2.5}$ NAAQS under subpart 1 and other NAAQS.

3. Comments and Responses

Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

J. Attainment Date Extensions

Background. Section 188(e) of the CAA provides that the EPA may grant a Serious area one attainment date extension of no more than 5 years "upon application by any state . . . if attainment by the [original Serious area attainment date] would be impracticable, the state has complied with all requirements and commitments pertaining to that area in the implementation plan, and the state demonstrates to the satisfaction of the Administrator that the plan for that area includes the most stringent measures that are included in the implementation plan of any state or are achieved in practice in any state, and can feasibly be implemented in the area."

The statute also includes factors that the EPA may consider in determining whether to grant the extension and the length of the extension, including "the nature and extent of nonattainment, the types and numbers of sources or other emitting activities in the area (including the influence of uncontrollable natural sources and transboundary emissions from foreign countries), the population exposed to concentrations in excess of the standard, the presence and concentrations of potentially toxic substances in the mix of particulate emissions in the area, and the technological and economic feasibility of various control measures." [187]

The proposal described the four main elements the state must submit when requesting a Serious area attainment date extension: (1) A demonstration that attainment by the statutory Serious area attainment date is impracticable; (2) a demonstration that the area is complying with all requirements and commitments in the applicable attainment plan; (3) a demonstration that the plan includes the MSM that are included in the implementation plan of any state, or are achieved in practice in any state; and (4) a demonstration of attainment by the most expeditious alternative date practicable. The proposal also included a discussion about the timing of extension request submissions, and how to interpret the second element in cases where the extension request is submitted after the state has already submitted an initial Serious area attainment plan. These topics are addressed in the following sections.

1. Demonstration That Attainment by the Statutory Serious Area Attainment Date is Impracticable

a. *Summary of Proposal.* The proposed rule discussed the requirements for a demonstration to show that it is impracticable for a Serious area to attain by the attainment date. This demonstration involves evaluating through air quality modeling whether all best available control measures will enable the area to attain the standard by the attainment date.

b. Final Rule. This section remains relatively unchanged from the proposal. In order to demonstrate that it is impracticable for an area to attain by the attainment date, the state would have to show that the implementation of all BACM/BACT (and additional feasible measures) will not bring the area into attainment by the statutory Serious area attainment date (*i.e.*, by no later than the end of the tenth calendar year after designation).[188] The statutory provision for demonstrating that it is impracticable to attain by the Serious area attainment date requires that the demonstration be based on air quality modeling (*see* CAA section 189(b)(1)(A)). Additional guidance on this demonstration is provided in Section VI.E of this preamble.

c. Comments and Responses. Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

2. Demonstration That the Area is Complying With all Requirements and Commitments in the Applicable Implementation Plan

a. Extension Request Submitted at the Same Time as the Serious Area Attainment Plan

i. Summary of Proposal

The EPA proposed to interpret the criterion under CAA section 188(e) that requires a state to have "complied with all requirements and commitments pertaining to that area in the implementation plan" simply to mean that the state has implemented the control measures in the SIP revisions it has submitted to address the applicable requirements in CAA sections 172 and 189. For a Serious area attainment date extension request being submitted contemporaneously with the "original" Serious area attainment plan for the area, the EPA proposed to read CAA section 188(e) not to require the area to have a fully approved attainment plan that meets the CAA's requirements for Moderate areas. The EPA also proposed to read this provision not to bar an extension if all or part of an area's Moderate area plan is disapproved or has been promulgated as a FIP, provided the area has complied with all of the requirements in the applicable FIP, or in the applicable SIP and FIP.[189]

ii. Final Rule

Some commenters stated that an area should only be able to receive an extension if the Moderate area plan had been fully approved by the EPA. Other commenters agreed with the EPA's proposed approach. They suggested that if a part of the Moderate plan had been disapproved, but it was clear that the area could not practicably attain by the Serious area attainment date, then the area should be able to receive an extension. Other commenters suggested that an area should not be deprived an extension if the approval of all or part of the Moderate area attainment plan is delayed due to logistical reasons or the EPA's inability to take final action in a timely manner.

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[186] The EPA believes that there is no real effect on attainment date determinations due to the small difference in statutory language in CAA section 188(c) basing the Moderate area attainment date on the "sixth calendar year after the area's designation" and the Serious area attainment date on the "tenth calendar year *beginning* after the area's designation," (emphasis added).

[187] Notably, these statutory criteria do not include specific ambient air quality criteria like the criteria that need to be met in the year prior to a Moderate area attainment date in order for the area to qualify for an attainment date extension under CAA section 188(d).

[188] This proposed approach parallels the EPA's proposed approach, described earlier in this preamble, for the impracticability option for Moderate areas under CAA section 189(a)(1)(B) in which all measures that qualify as RACM and RACT and all additional reasonable measures are required before a Moderate area plan could show impracticability of attainment by the statutory Moderate area attainment date (the end of the sixth calendar year after designation).

[189] In Vigil v. Leavitt, 366 F.3d 1025, amended at 381 F.3d 826 (9th Cir. 2004), the court indicated that an area that had previously failed to meet a requirement of the CAA could still be eligible to receive an attainment date extension: "Nowhere does the provision limit extensions to those states that never made a misstep in their efforts to comply with the Act."

The final rule does not require the area to have a fully approved Moderate area plan when the attainment date extension request is submitted at the same time as the Serious area plan. An extension is allowed if the area is complying with all Moderate area requirements and commitments pertaining to that area in the state's submitted Moderate area implementation plan, but the plan does not need to be fully approved by EPA. The EPA considers this to be a reasonable interpretation of the statute because, as noted by commenters, there may be various reasons why an area may not have a fully approved Moderate area SIP by the time an extension request may be granted.

iii. Comments and Responses

Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

b. Extension Request Submitted After Submission of an "Original" Serious Area Attainment Plan

i. Summary of Proposal

For a Serious area extension request that was submitted after submission of an "original" Serious area attainment plan that contained an attainment demonstration meeting the requirements of CAA section 189(b)(1)(A)(i), the EPA proposed to read CAA section 188(e) not to require the area to have a fully approved attainment plan that meets the CAA's requirements for Serious areas, but to have a fully approved Moderate area attainment plan. The EPA stated that this proposed interpretation of this criterion would apply whether the area was reclassified to Serious under the EPA's discretionary authority (CAA section 188(b)(1)) or by operation of law upon failing to attain by the Moderate area attainment date (CAA section 188(b)(2)).

The proposal also requested comment on an "alternative interpretation" that, as pointed out by some commenters, appears to also have mistakenly required the same thing as the first option: That the state would need to have a fully approved Moderate area attainment plan in order to receive an extension.

The EPA notes that Section VI.C of this preamble, Timing of Extension Request Submission, also discusses this issue. It requested comment on whether, for areas that had already submitted Serious area attainment plans, it would be appropriate that the state must have complied with all requirements and commitments in the area's initial Serious area plan (the EPA's preferred option), or in the Moderate area plan.

ii. Final Rule

After considering the comments received on this issue, the EPA is finalizing an approach that requires that, where a Serious area attainment date extension is being submitted *after* the initial Serious area attainment plan has been submitted, the state would need to demonstrate that it was complying with all Serious area requirements and commitments pertaining to the area in the plan it had initially submitted. However, it would not need a fully approved Serious area attainment plan. The EPA believes the state should not be prevented from obtaining an attainment date extension in the event the EPA is unable to take final action on a submitted plan in a timely manner. The original proposal did not specify Serious area provisions implementing this approach, but commenters noted the proposed analogous provisions for Moderate areas seeking 1-year extensions, and suggested that EPA should adopt a similar approach for Serious areas. Under this approach, the state would not need a fully approved Serious area plan; it would be able to receive an extension if it had already submitted the Serious area plan but had not received EPA approval yet, and if it was complying with all Serious area requirements and commitments pertaining to the area in the state's implementation plan. The EPA also considered an alternative option wherein the state would be able to receive an extension only if it had a fully approved Serious area attainment plan. The commenters did not favor this option, nor does the EPA.

iii. Comments and Responses

Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

3. Demonstration That the Plan Includes the MSM That Are Included in the Implementation Plan of Any State, or Are Achieved in Practice in Any State

To qualify for any extension of a Serious area attainment date, CAA section 188(e) requires a state to "demonstrate to the satisfaction of the Administrator that the plan for the area includes the most stringent measures that are included in the implementation plan of any state, or are achieved in practice in any state, and can feasibly be implemented in the area." In its prior guidance in the Addendum, the EPA interpreted the term "most stringent measures" (MSM) to mean the maximum degree of emission reduction that has been required or achieved from a source or source category in any other attainment plans or in practice in any other states and that can feasibly be implemented in the area seeking the extension, such as what LAER represents for new or modified sources under the NNSR permit program.[190]

a. Summary of Proposal. The proposal suggested that a state would need to follow a process for determining MSM for a Serious nonattainment area that is generally similar to proposed Option 2 for BACM/BACT described in Section VI.D of this preamble, which would include exemptions from MSM for sources in *de minimis* source categories if such measures did not collectively advance the attainment date for the area by at least 1 year. The EPA also proposed an alternative approach for determining MSM for a Serious nonattainment area that would provide for *de minimis* source category exemptions for MSM only for those source categories that do not contribute significantly to ambient $PM_{2.5}$ concentrations in the Serious nonattainment area, an approach more closely aligned with proposed Option 1 for determining BACM/BACT.

For each approach, the proposal described a five step process for determining MSM: (1) Update the emissions inventories for the nonattainment area; (2) identify *de minimis* source categories through modeling; (3) identify potential MSM; (4) compare MSM to control measures already adopted in the SIP for the nonattainment area; and (5) adopt and implement any MSM that are more stringent than any measures that are already approved into the SIP. The proposal requested comment on whether the two proposed approaches are sufficiently consistent with the agency's respective proposed approaches to BACM/BACT determinations.

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[190] Addendum to the General Preamble, 59 FR 41998 (August 16, 1994), at page 42010.

b. Final Rule. Almost all comments received on this section involved the issue of whether the rule should allow for *de minimis* source categories to be exempted in the process of determining MSM. A few commenters supported the identification of *de minimis* source categories and their exemption from the MSM requirement. These commenters were split in terms of their preference for the two *de minimis* approaches that were presented. Some commenters suggested that under any approach, an area could still exclude a measure from MSM based on the inability to feasibly implement the measure in the area. Some commenters stated that it would be too burdensome to require a state to evaluate whether a particular source category had a "significant" or *de minimis* impact on air quality, while others supported the approach. One group of commenters disagreed with the notion that a Serious area could exempt *de minimis* sources from the MSM requirement in the first place. They stated that *de minimis* exemptions would not be appropriate for MSM, for which the CAA has expansive language requiring the most stringent measures required in any SIP or achieved in practice in any state.

After considering the comments received on the *de minimis* source category issue, the EPA is adopting a final rule that does not include an explicit *de minimis* source category exemption in determining MSM. The agency's reasons for not allowing a *de minimis* source category or *de minimis* impact concept, articulated in prior sections on determining RACM/RACT (Section IV.D) and BACM/BACT (Section VI.D), apply equally here. Moreover, the EPA believes it would be particularly inappropriate to allow for a *de minimis* source category approach for MSM. The statute requires MSM to be implemented because the area is unable to attain the standard within 10 years of designation and has a more severe air quality problem. Congress clearly intended for such areas to more widely explore potential control measure possibilities, and a *de minimis* source category exclusion would be contrary to that intent.

The EPA believes the rule provides sufficient flexibility in the MSM area control measure analysis and attainment demonstration process enabling states to identify sources that should not be subject to control measures, including the ability to develop precursor demonstrations to exclude precursors from control requirements, and to consider case-specific factors in determining technological and economic feasibility of potential control measures. If the final rule were to include an explicit step to conduct a *de minimis* source category analysis on the entire inventory early in MSM process, the EPA also believes that there is a risk that such an analysis may bring about investment of scarce time and analytical resources on analysis of categories to exclude rather than on the identification of the most stringent control measures necessary to attain the standard. As noted in Section IV.D of this preamble on Moderate areas, and again in [serious area section] the EPA also finds that from a technical perspective, it would be very challenging to implement a *de minimis* source category process in a consistent manner nationally without clear guidelines describing how narrowly or how broadly a *de minimis* exemption could apply to a "source category," or how the technical analysis would need to be performed. For all of these reasons, a *de minimis* source category concept is not included in the final rule for MSM.

Process for determining MSM. The following sections describe the process for determining MSM that is finalized in this rule: (a) Update emissions inventories; (b) identify potential MSM; (c) compare MSM to control measures already adopted in the SIP for the nonattainment area; and (d) adopt and implement any MSM that are more stringent than any measures that are already approved into the SIP. (*See* 40 CFR 51.1010(b)(1)–(4).)

i. Update Emissions Inventories

The first step would be for the state to update as needed the emissions inventory of direct $PM_{2.5}$ and $PM_{2.5}$ precursor sources and source categories in the Serious nonattainment area required under CAA section 172(c)(3) for any attainment plan submission. The EPA expects that the state would meet this inventory requirement as part of its Serious area attainment plan submission without any additional work if the state submits the Serious area attainment date extension request simultaneously with the plan itself. However, in the event the attainment date extension request is submitted after the "original" Serious area attainment plan for the area (*i.e.,* toward the end of the Serious area attainment period), then the state must submit a more recent, complete and accurate emissions inventory that meets the same emissions inventory requirements for Moderate and Serious $PM_{2.5}$ nonattainment areas pursuant to CAA section 172(c)(3), as well as an attainment projected inventory as part of the new Serious area attainment plan for the area. The inventories submitted to support a Serious area attainment plan must also include point sources meeting the lower major stationary source threshold in 40 CFR part 51, subpart A.

ii. Identify Potential MSM

The second step in determining MSM involves identifying the potentially MSM in other state implementation plans for $PM_{2.5}$ or other NAAQS, or that are used in practice in other states for controlling emissions from sources similar to those listed in the emissions inventory. This information can be obtained from a number of sources, including state regulations on the books, state summaries of control measures, state permitting databases, the RACT/BACT/LAER Clearinghouse, and control measure compilations developed by regional or state/local organizations. Elsewhere in this preamble, the EPA recommends that a state identify potential measures for consideration as RACM/RACT or BACM/BACT by evaluating control measures implemented by other states to meet $PM_{2.5}$ NAAQS or other NAAQS. Thus, a state seeking to identify MSM should be able to start its process using the work already undertaken for the nonattainment area's RACM and BACM determinations and to make updates to the list of potential control measures accordingly.

For each measure, the state is required to determine its technological and economic feasibility for sources in the area. States should apply more stringent criteria for determining the feasibility of potential MSM than that described for BACM and BACT in Section VI.D of this preamble. In some situations, MSM could involve increasing the coverage of measures that were already adopted and implemented as BACM and BACT (for example, changing out an even greater percentage of woodstoves in an area, if such sources were major contributors to the air quality problem in the nonattainment area).

However, because BACM and BACT represent the "best" level of control feasible for an area, in some cases it may be possible for the MSM requirement to result in no more controls and no more emissions reductions in an area than result from the implementation of BACM and BACT. Stated another way, there may be sources or categories for which no other feasible controls exist beyond what a state has already adopted as BACM or BACT. Given the strategy in the nonattainment provisions of the CAA to offset longer attainment timeframes with more stringent control requirements, the EPA therefore interprets the MSM provision so as to increase the potential that it will result in additional controls beyond the set of measures adopted as BACM and BACT. In the MSM analysis, in addition to identifying additional candidate MSM, the state is required to reanalyze any measures that were rejected during the state's BACM and BACT analysis for the area to see if they are now feasible for the area given the potentially longer attainment date (up to 5 years after the statutory Serious area attainment date), or given the changes that have occurred in the interim that improve the feasibility of previously rejected measures.

iii. Compare MSM to Control Measures Already Adopted in the SIP for the Nonattainment Area

The third step requires the state to compare the potential MSM that have been identified for each source type or source category against the measures, if any, already adopted into the Serious area SIP for that source category to determine if such MSM would provide any additional reductions. This comparison will be used in determining what measures to adopt in the next step.

iv. Adopt and Implement Any MSM That are More Stringent Than Any Measures That Are Already Approved Into the SIP

The fourth step requires the adoption of any MSM that are more stringent than existing measures as a regulation, and requires submission of the regulation as part of the SIP, as well as expeditious implementation of the regulation. For any measures that the state determines cannot be feasibly implemented in the area, it should provide a reasoned justification for rejecting the potential MSM.

The EPA notes that CAA section 188(e) does not identify a deadline for a state to implement MSM, whereas elsewhere the statute establishes a deadline for implementing RACM and RACT and BACM and BACT [*see* CAA sections 189(a)(1)(C) and 189(b)(1)(A)], respectively). However, because the clear intent of CAA section 188(e) is to minimize the length of a Serious area attainment date extension, the EPA requires that the implementation of MSM must be as expeditious as practicable but no later than 1 year prior to the alternate Serious area attainment date identified by the state in its extension request.

c. Comments and Responses. Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

4. Demonstration of Attainment by the Most Expeditious Alternative Date Practicable

Section 189(b)(1)(A) of the CAA requires that a Serious area plan demonstrate attainment, using air quality modeling, by the most expeditious date practicable after the statutory Serious area attainment date. This demonstration is the final criterion that must be met before the EPA may consider granting an extension. The agency's determination of whether the plan provides for attainment by the most expeditious date practicable would depend on whether the plan provides for implementation of BACM and BACT by the statutory implementation deadline and MSM as expeditiously as practicable. In no case would a state be able to seek an extension of a Serious area attainment date to a date more than 5 years past the statutory attainment date for Serious areas. Section VI.E of this preamble describes the EPA's proposed requirements for attainment demonstration modeling for Serious area attainment plans.

5. Apply for an Attainment Date Extension

The state would have to apply to the EPA for any extension of a Serious area attainment date. The request would have to accompany an attainment plan submission containing an attainment demonstration showing attainment by the most expeditious alternative date practicable, and the state would need to submit modeling as part of the attainment demonstration in accordance with Section VI.E of this preamble. Furthermore, the state would have to provide the public reasonable notice and a public hearing on the attainment date extension request before submitting it to the EPA, as the EPA would consider it an integral part of the attainment demonstration and part of the revised SIP submission which is subject to the requirements of the CAA and federal regulations for public notice and hearing on SIP revisions.

6. Timing of Extension Request Submission

The EPA has identified two potential Serious area attainment date extension scenarios: (1) The more straightforward scenario where the attainment date extension is included with the initial Serious area plan, and (2) the scenario where a state may prepare and fully implement a timely Serious area plan that includes a modeling analysis that demonstrates the area would attain no later than the statutory Serious area attainment date (the end of the tenth calendar year following designation), and yet the state may see as the attainment date nears that the Serious area will in fact fail to attain by its projected attainment date. While the statute provides a remedy to be instituted immediately upon failure of a Serious area to attain the standard (through contingency measures and other measures stipulated in CAA section 189(d)), the EPA also believes that the criteria of CAA section 188(e) could be applied after a state submits a Serious area attainment plan but prior to the area failing to attain (as long as the area had not already been granted a prior Serious area attainment date extension under CAA section 188(e)).

In the first scenario, there is no need to specify any further timing requirements beyond those previously described for Serious area plan submission. However, for the second scenario the final rule needs to specify a due date for the request. The EPA believes that it would be acceptable for a state to submit a Serious area attainment date extension request (as described earlier) together with a new Serious area attainment plan meeting all of the statutory requirements that apply to such plans. The state should submit the extension request and new implementation plan to EPA as early as possible, but the final rule requires that it must be submitted no later than 60 days prior to the approved attainment date for the area or, in the absence of an approved attainment date, no later than 60 days prior to the applicable statutory attainment date for Serious areas (*i.e.*, the end of the tenth year after designation). *See* 40 CFR 51.1005(b)(6). The EPA believes that this deadline is necessary due to its statutory obligation to determine whether the area attained by the attainment date. In order to preserve the possibility that EPA could review and take action on the new attainment plan for the area and the accompanying attainment date extension request prior to its deadline for making the attainment determination the EPA estimates that the 60-day deadline provides the minimum amount of necessary time. The EPA notes that during this time, it would have to ascertain the status of compliance with all requirements and commitments in the Moderate and initial Serious area attainment plans for the area, evaluate the state's justification for the selection of the alternate attainment date (including modeling), and review provisions for the implementation of MSM).

VII. Requirements Under CAA Section 189(d) for $PM_{2.5}$ Serious Areas That Fail To Attain the NAAQS by the Applicable Attainment Date

Background. In the event that a Serious area fails to attain the $PM_{2.5}$ NAAQS by the applicable attainment date, CAA section 189(d) requires that "the state in which such area is located shall, after notice and opportunity for public comment, submit within 12 months after the applicable attainment date, plan revisions which provide for attainment of the . . . standard and, from the date of such submission until attainment, for an annual reduction in PM_{10} or PM_{10} precursor emissions within the area of not less than 5 percent of the amount of such emissions as reported in the most recent inventory prepared for such area."

In addition to the requirement for the submission of control measures providing for a 5 percent reduction in emissions of certain pollutants on an annual basis, the EPA interprets CAA section 189(d) as requiring the State to submit an attainment plan that includes the same basic statutory plan elements that are required for other attainment plans. Because section 189(d) does not include a specific provision specifying a new attainment date, the EPA relies on sections 179(d)(3) and 172(a)(2) of the CAA to establish the attainment date for such plans to be as expeditiously as practicable, and no later than five years from the effective date of the EPA's determination that the area failed to attain. Pursuant to those provisions, the Administrator may also extend the attainment date to the extent the Administrator deems appropriate, for a period no greater than 10 years from the effective date of the EPA's determination that the area failed to attain, considering the severity of nonattainment and the availability and feasibility of pollution control measures. The state must submit as part of the new attainment plan a justification explaining that it represents an attainment date that is as expeditious as practicable.

A state must submit to the EPA its plan to meet the requirements of CAA section 189(d) in the form of a complete attainment plan submission that includes the following elements: (i) Base year and attainment projection year emissions inventory requirements; (ii) additional attainment plan control strategy requirements, including control measures and a demonstration that each year the area will achieve at least a 5 percent reduction in emissions of direct $PM_{2.5}$ or a 5 percent reduction in emissions of a $PM_{2.5}$ plan precursor based on the most recent emissions inventory for the area; (iii) attainment demonstration and modeling; (iv) RFP plan and quantitative milestones; and (v) contingency measures. A state with a Serious $PM_{2.5}$ nonattainment area that fails to attain the NAAQS by the applicable Serious area attainment date must also address any statutory requirements relevant to Moderate nonattainment areas and Serious nonattainment areas under CAA sections 172 and 189 of the CAA that have not already been satisfied. These elements are discussed in more detail in the following sections.

A. Plan Due Dates

1. Summary of Proposal

The proposed rule indicated that under CAA section 189(d), the state would be required to submit the attainment plan for a Serious area that failed to attain the NAAQS by the Serious area attainment date within 12 months after the applicable attainment date.

2. Final Rule

The final rule remains unchanged from the proposal. Section 189(d) of the CAA requires a state with a Serious PM_{10} nonattainment area that failed to attain the NAAQS by the applicable Serious area attainment date to submit a new attainment plan submission for the area within 12 months after the missed "applicable attainment date." The EPA finds that the most straightforward interpretation of the statutory language is that the state must submit a new attainment plan for the area—with all required elements—within 12 months after the missed applicable attainment date. Although the EPA may take up to 6 months to make a determination that the area failed to attain, the text of the statute ties the 12-month SIP due date to the missed attainment date, not to the date that the EPA determines that the area failed to attain. Because all attainment dates for implementation of the $PM_{2.5}$ NAAQS under subpart 4 are expressed in terms of the end of a calendar year, the new due date for a SIP required under CAA section 189(d) also would be due on December 31—of the year following the area's Serious area attainment date. This requirement is consistent with the manner in which the CAA section 189(d) SIP submission date has been interpreted for implementation of the PM_{10} NAAQS in the past. The EPA recognizes that this statutory timeline is shorter than for Moderate or Serious area attainment plans, but expects that, given the prior planning history for such areas, much of the analyses to support these new attainment plan submissions will be based on updates to previous analyses, which would require less time than generating new analyses. In any event, it is clear from the face of the statute that Congress intended that states with areas that fail to attain the NAAQS by the outermost statutory attainment date for Serious areas must proceed more quickly to revise their SIPs to provide for attainment of the NAAQS.

3. Comments and Responses

Any comments received on this section are addressed in the Response to Comments document found in the docket for this action.

B. Emissions Inventory Requirements

1. Summary of Proposal

The EPA also proposed that the inventory requirements under section 189(d) for Serious areas that fail to attain by the attainment date should be the same as those for Moderate and Serious areas, but with a change to the appropriate year for the inventory. The EPA proposed that for these areas, the inventory year must be one of the 3 years from which monitored data was used to determine that the area failed to attain the $PM_{2.5}$ NAAQS by the applicable Serious area attainment date. In addition, the EPA proposed an alternative approach that would allow the state to use an earlier year than one of the 3 years used to determine that the area failed to attain. As proposed, this alternative approach would require written justification that included an explanation of how the inventory modifications adequately incorporate emissions reductions projected to be achieved through the implementation of BACM and BACT, and additional feasible control measures submitted with the original Serious area attainment plan for the area, and through implementation of MSM if appropriate.

2. Final Rule

The statute requires states to use an emissions inventory that meets the requirements of section 172(c)(3). The final rule recommends using an inventory for one of the 3 years for which air quality data were used to determine that the area failed to attain in order to meet this requirement. However it also allows the state to use an earlier inventory year under certain circumstances.

As with all other attainment plan submissions required for Moderate and Serious $PM_{2.5}$ nonattainment areas, a state must develop its submission to meet CAA section 189(d) based on "the most recent inventory prepared for such [nonattainment] area." This inventory must meet the same requirements that would apply to any other emissions inventory submitted for a $PM_{2.5}$ nonattainment area to meet the requirements of CAA section 172(c)(3), which requires "a comprehensive, accurate, current inventory of actual emissions of the relevant pollutants" in the nonattainment area. Therefore this rule requires that the inventory submitted with an attainment plan to meet CAA section 189(d) requirements must also meet the EPA's regulatory requirements for such emissions inventories as described earlier in this preamble under Section IV.B of this preamble (for Moderate area attainment plans) and Section VI.B of this preamble (for Serious area attainment plans).

One important aspect of the emissions inventory required to be submitted with an attainment plan under CAA section 189(d) is its role as the basis for calculating the emissions reductions of direct $PM_{2.5}$ or any $PM_{2.5}$ plan precursor necessary to satisfy the 5 percent annual reduction criterion of CAA section 189(d). For this reason, the "most recent inventory" for the area must not only meet the criteria described for a base year inventory submitted pursuant to CAA section 172(c)(3) and in Section VI.B of this preamble, but it also must fully account for emissions reductions achieved to date through the implementation of all RACM and RACT, BACM and BACT, additional reasonable and feasible measures, and MSM (as applicable) submitted with the Moderate and original Serious area attainment plans for the area. In this way, the state will calculate the additional reductions that the nonattainment area will need beyond those already required in order to fulfill the requirements of CAA section 189(d) and bring the area into attainment as expeditiously as practicable.

To ensure that the inventory is representative of the nonattainment problem in the area current at the time of the CAA section 189(d) submission, the EPA strongly recommends that the inventory year be one of the 3 years from which monitored air quality data were used to determine that the area failed to attain the $PM_{2.5}$ NAAQS by the applicable Serious area attainment date. The EPA believes that associating the inventory with one of these 3 years is reasonable in light of the fact that some control measures (*e.g.,* BACM and BACT controls and additional feasible measures) for sources in the area may not be implemented until the beginning of the attainment year. Thus, using an emissions inventory for one of those 3 years will help ensure that the inventory adequately captures the emissions reductions already achieved through the prior implementation of control measures for Moderate and Serious areas.

The EPA recognizes that the timing and resource requirements for inventory preparation may make it challenging in some cases for a state to use an inventory for a year that is one of the 3 years from which monitored data were used to determine that the area failed to attain the NAAQS by the applicable attainment date. To address such cases, the final rule allows states to use an earlier inventory year in the plan, provided that (1) the year is selected in consultation with the appropriate EPA Regional Office, and (2) the state provides a written justification for selecting the earlier year in its SIP submission. *See* 51.1008(c)(1). At a minimum, the inventory must adequately incorporate emissions reductions projected to be achieved through the implementation of BACM and BACT, and additional feasible control measures submitted with the original Serious area attainment plan for the area, and MSM if appropriate. Because these emissions reductions may have occurred after the inventory year the state intends to use, adjustments to the original inventory for that year would need to be made to reflect those reductions. The written justification must also include an explanation of how those reductions have been incorporated into the inventory. In considering use of an "older" inventory, the EPA recommends that states weigh the possible impact of using an older inventory that could have higher emissions than a more current inventory. The state may be obligated to achieve a larger annual emissions reduction to satisfy the 5 percent annual reduction criteria of CAA section 189(d) than would otherwise be required if a newer inventory were used with lower emissions.

3. Comments and Responses

Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

C. Pollutants To Be Addressed in the Plan

1. Summary of Proposal

The proposed rule indicated that to determine what pollutants need to be addressed in the attainment plan and 5 percent requirement in CAA section 189(d), the state could provide a demonstration to the EPA showing that a particular precursor does not significantly contribute to $PM_{2.5}$ levels that exceed the standard. The proposal suggested that if the precursor demonstration is approved by the EPA, then the state would not be required to evaluate or adopt control measures for that precursor, nor would the state need to address the precursor in meeting the 5 percent annual emissions reduction requirement in section 189(d). The proposal indicated that Section III of the preamble further discussed options describing optional precursor demonstrations.

2. Final Rule

The final rule remains relatively unchanged with respect to this issue. Section 189(d) of the CAA requires states to develop a new attainment plan for an area that failed to attain by the applicable Serious area attainment date that provides for "an annual reduction in PM_{10} or PM_{10} precursor emissions within the area of not less than 5 percent of the amount of such emissions" reported in the latest emissions inventory for the area. In Section III of this preamble, the EPA describes optional approaches by which a state could demonstrate that a $PM_{2.5}$ precursor does not contribute significantly to $PM_{2.5}$ levels that exceed the standard in the area, and thereby would not need to adopt control measures for that precursor in the area. The EPA also interprets the CAA generally to allow a state to provide such a "precursor demonstration" for the attainment plan required under section 189(d), even if the area has previously failed to attain the relevant NAAQS by the applicable Serious area attainment date. If the state has provided a demonstration with the previous Serious area attainment plan to establish that a precursor does not significantly contribute to $PM_{2.5}$ levels for purposes of the attainment plan for the area, and it seeks to maintain the status of that precursor as not significantly contributing to $PM_{2.5}$ levels in the area, the state would still need to provide an updated precursor demonstration for the new section 189(d) SIP because emissions and atmospheric conditions will have changed since the previous demonstration was submitted, and the conclusions from any previous precursor demonstration may no longer be appropriate. *See* Section III of this preamble for more information about potential precursor demonstrations that could be conducted to show that a particular precursor does not contribute significantly to $PM_{2.5}$ levels that exceed the standard.

3. Comments and Responses

Any comments received on this section are addressed in the Response to Comments document found in the docket for this action.

D. Attainment Plan Control Strategy

1. Background

As for other $PM_{2.5}$ NAAQS attainment demonstrations, the overarching requirement for the CAA section 189(d) control strategy is that it needs to provide for attainment of the standard as expeditiously as practicable. The strategy must include any additional measures (beyond those already adopted in previous SIPs for the area as RACM/RACT, BACM/BACT, MSM (if applicable), for example) that are needed for the area to attain expeditiously. The plan must also demonstrate that the new attainment plan will at a minimum achieve an annual 5 percent reduction in emissions of direct $PM_{2.5}$ or any $PM_{2.5}$ plan precursor from sources in the area, based on the most recent emissions inventory for the area. However, it is important to emphasize that a CAA section 189(d) plan must require other control measures (even if beyond those sufficient to meet the annual 5 percent reduction requirement) that are needed in order to meet the overarching goal of attaining the standard as expeditiously as practicable.

2. 5 Percent Annual Reduction in Direct $PM_{2.5}$ or Any $PM_{2.5}$ Plan Precursor

a. Summary of Proposal. Section 189(d) of the CAA requires an "annual reduction in PM_{10} or PM_{10} precursor emissions within the area of not less than 5 percent of the amount of such emissions as reported in the most recent inventory prepared for such area." Because the statute is ambiguous with regard to how this language should apply for the $PM_{2.5}$ NAAQS, the EPA proposed two options for interpreting this provision. One option interpreted this language to require a 5 percent annual reduction in all pollutants that contribute to $PM_{2.5}$, meaning direct $PM_{2.5}$ and the four precursors (SO_2, NO_X, VOC, and ammonia), or those precursors that are necessary to control in the area. A second option interpreted the language more literally, meaning that it required a 5 percent annual reduction of *either* direct $PM_{2.5}$ or $PM_{2.5}$ precursor emissions on an annual basis, and that a state could elect to control either direct $PM_{2.5}$ or $PM_{2.5}$ precursor emissions in a given year. (Note that under either proposed option, a precursor still could be excluded from control requirements if the state submitted a new precursor demonstration as part of the revised CAA section 189(d) implementation plan showing that the precursor does not contribute significantly to levels that exceed the relevant $PM_{2.5}$ NAAQS, and such demonstration is approved by the EPA).

b. Final Rule. One group of commenters supported the inclusion of direct $PM_{2.5}$ and all precursors in the calculation of the annual emission reduction requirement because precursors typically play a significant role in $PM_{2.5}$ formation, and they believed that allowing states to be able to pick and choose which pollutants to reduce would undermine efforts to attain most expeditiously. Other commenters supported the second option because they believe it follows a plain reading of the statute (*i.e.,* it uses the word "or"), and because it would allow a state to devote resources toward achieving emissions reductions in those pollutants that are most effective in reducing $PM_{2.5}$ concentrations and thus in attaining the NAAQS most expeditiously.

After considering comments on this issue, the EPA agrees that the second option is the more appropriate reading of the statute. When paired with the overarching requirement for the area to reach attainment of the NAAQS as expeditiously as practicable, and with provisions in the rule allowing a state to demonstrate that a precursor does not provide a significant contribution to $PM_{2.5}$ levels, the EPA believes that such an interpretation is reasonable and would authorize states to focus emission reduction efforts on those pollutants that will be most effective for purposes of attainment in a given area. For example, interpreting the statutory provision to require emissions reductions in a specific precursor merely for purposes of meeting a 5 percent requirement, without regard to whether the reductions would be effective for purposes of attainment, could be counterproductive to reducing the emissions of other pollutants that could result in earlier attainment. This interpretation of CAA section 189(d) is also consistent with past EPA actions for an area that failed to attain the PM_{10} Serious area attainment date.[191]

Thus, in applying the statutory language to implementation of the $PM_{2.5}$ NAAQS in the final rule, the EPA interprets an "annual reduction in PM_{10} or PM_{10} precursor emissions within the area of not less than 5 percent of the amount of such emissions" to mean that an attainment demonstration for a Serious area that failed to attain by the attainment date must include control measures providing for a 5 percent annual reduction in direct $PM_{2.5}$ emissions *or* in the emissions of any $PM_{2.5}$ plan precursor. The EPA considered whether the statutory phrase "precursor emissions" requires a 5 percent reduction of each individual plan precursor in each year, but determined that such an interpretation was unnecessarily restrictive in light of the overarching requirement for states to adopt the control measures that will result in attainment as expeditiously as practicable, and is not compelled by the wording of the 5 percent requirement in the statute. Accordingly, the final rule requires an annual reduction of either direct $PM_{2.5}$ or any single $PM_{2.5}$ precursor.

Because this requirement is an annual one, the final rule also authorizes the state to meet the 5 percent requirement to vary between direct $PM_{2.5}$ and $PM_{2.5}$ precursors, or among precursors, from year to year throughout the duration of the section 189(d) attainment plan, so long as the attainment plan provides for expeditious attainment and meets the other applicable attainment plan requirements. For example, in year 1 a state could provide for a 5 percent reduction of direct $PM_{2.5}$, and in year 2 could provide for a 5 percent reduction in a precursor, and so on.

c. Comments and Responses. *Comment:* Some commenters suggested that a more appropriate approach would be to require a 5 percent annual reduction in $PM_{2.5}$ ambient concentrations (rather than in pollutant emissions), and allow the state to meet this air quality target with any combination of emissions reductions.

Response: The EPA does not find that this approach would be consistent with the statutory language in CAA section 189(d), which clearly expresses the requirement in terms of emissions reductions (*i.e.,* "annual reduction in PM_{10} or PM_{10} precursor emissions within the area of not less than 5 percent of the amount of such emissions as reported in the most recent inventory prepared for such area.") Moreover, the EPA is concerned that this approach would necessitate, on an annual basis, a complex modeling analysis or at the very least some other analytical approach to translate emissions to ambient concentrations. The burdens of such analysis could be significant, and it is unclear what benefit would be realized from such an approach. States are already obligated to provide a modeled attainment demonstration as part of the new SIP submission to meet the requirements of section 189(d), and the 5 percent requirement is a separate requirement that the statute explicitly imposes in addition to that modeled attainment demonstration. For these reasons, the EPA is not adopting the commenter's suggested air quality approach in the final rule.

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[191] For example, *see* 69 FR 30006 (May 26, 2004). Approval and Promulgation of Implementation Plans for California-San Joaquin Valley PM–10 Nonattainment Area; Serious Area Plan for Attainment of the 24-Hour and Annual PM–10 Standards.

3. Calculating the 5 Percent Annual Reductions

a. Summary of Proposal. The proposed rule provided an example of how annual reductions would be tracked under this provision, and it also provided another example describing how reductions in excess of the 5 percent requirement in 1 year could be "carried forward" to help meet the requirement in a future year.

b. Final Rule. The previous section 2 explains that the EPA interprets the statute to require a 5 percent annual reduction in direct $PM_{2.5}$ emissions *or* in the emissions of any one $PM_{2.5}$ plan precursor in each year, until attainment. The requisite minimum 5 percent emissions reduction level for any pollutant must be calculated from the total emissions of the pollutant contained in the most recent inventory for the area, as described earlier in this section. The requirement for a 5 percent annual reduction in any one pollutant, calculated based on the emissions levels in the most recent inventory, must then be achieved every year between the CAA section 189(d) plan submission date and the new projected attainment date for the area.

For example, assume it is 2026, and based on monitoring data from years 2023–2025, a Serious area has failed to attain the 2012 $PM_{2.5}$ NAAQS within 10 years of designation. Assume also that the most recent inventory available for an area subject to CAA section 189(d) is for the year 2023. This inventory would serve as the base inventory for determining the 5 percent emissions reduction requirement under CAA section 189(d). If the state elects to reduce direct $PM_{2.5}$ emissions each year of the plan (*i.e.,* instead of choosing to reduce a precursor), and the most recent inventory ("base inventory") indicates that emissions of direct $PM_{2.5}$ from all sources in the area are 10,000 tons/year, then the area at a minimum would need to reduce emissions of direct $PM_{2.5}$ by 5 percent of the 2023 base inventory, or 500 tons, each year until the area attains the NAAQS. Thus, in the first year following submission of the CAA section 189(d) plan for the area, emissions of direct $PM_{2.5}$ could not exceed 9500 tons/year; in the second year, emissions could not exceed 9000 tons/year; and so forth. Note that if the area needs emissions reductions beyond this amount (*i.e.,* in direct $PM_{2.5}$ or in $PM_{2.5}$ plan precursors) in order to meet the overarching requirement of attaining the standard as expeditiously as practicable, then it must adopt and implement such control measures.[192]

Although CAA section 189(d) requires that a state develop measures that will obtain annual emissions reductions of "not less than 5 percent" from the most recent inventory, the EPA interprets this language to authorize states to maximize emissions reductions in earlier years and still meet the 5 percent per year requirement for subsequent years. The EPA notes that interpreting the statute in this way will encourage states to implement measures earlier, where possible, rather than delay implementation of measures merely to assure that the 5 percent requirement can be met in later years. Thus, using the example described earlier, the annual reduction requirement for the area would be 500 tons/year from a base year emissions level of 10,000 tons/year. The required level after year 1 would be 9500 tons/year, after year 2 the level would be 9000 tons/year, and so on. If the area reached a level of 8100 tons/year by the end of year 3, then by the end of year 4 it would only need to reduce emissions by 100 tons/year to yield an emissions level of 8000 tons/year. Thus, this approach will allow states to carry forward any emissions reductions beyond the required minimum 5 percent in a given year to the next year as a means to encourage states to achieve emissions reductions as quickly as possible, as long as those emissions reductions are realized after the Serious area attainment date.[193]

The previous example addresses a situation where the state chooses to reduce only direct $PM_{2.5}$. In that example, the 5 percent annual reduction amount for any year would be 5 percent of the 2023 $PM_{2.5}$ emission inventory amount of 10,000 tons. The final rule allows the state to meet its 5 percent reduction each year in terms of reducing direct $PM_{2.5}$ or any $PM_{2.5}$ plan precursor. Thus, if the area had a 2023 emission inventory that included 5000 tons of each of the four $PM_{2.5}$ precursors, and if the state chose to meet its "5% reduction" obligation in a particular year by reducing SO_2, it would need to achieve emissions reductions of 250 tons of SO_2 in that year.

The EPA is also clarifying its interpretation of the statutory language under CAA section 189(d) that requires a state to submit a new attainment plan to achieve annual reductions "from the date of such submission until attainment," to mean annual reductions beginning from the due date of such submission until the new projected attainment date for the area based on the new or additional control measures identified to achieve at least 5 percent emissions reductions annually. This clarification is intended to make clear that even if a state is late in submitting its CAA section 189(d) plan, the area must still achieve its annual 5 percent emissions reductions beginning from the date by which the state is required to make its CAA section 189(d) plan submission, not by some later date. Because attainment dates for $PM_{2.5}$ nonattainment areas established under subpart 4 occur at the end of the calendar year, any CAA section 189(d) plan, which is required within 12 months of the missed attainment date for the area, would also be due by the end of the calendar year.

c. Comments and Responses. Any additional comments received on this section are addressed in the Response to Comments document found in the docket for this action.

4. Additional Guidance on CAA Section 189(d) Control Measures

The EPA believes that an appropriate starting point for a state to identify measures to provide for attainment and to meet the requisite minimum 5 percent annual emissions reductions of direct $PM_{2.5}$ and $PM_{2.5}$ precursors is the list of potential control measures initially required to be identified as part of the RACM and RACT determination process, the BACM and BACT determination process, or the MSM determination process (if appropriate) for the area. The EPA anticipates that a state should be able to rely on much of the work it previously undertook to develop this list of potential control measures and analyze their technological and economic feasibility, and the time required to implement them. Control measures that the state identified but did not previously adopt may be likely measures for inclusion in an attainment plan to meet the requirements of section 189(d). However, for purposes of meeting the requirements of CAA section 189(d), the

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[192] *See* Section IV.D.3 of this preamble for a discussion on sources of information for control measures.

[193] 69 FR 30006 (May 26, 2004).

EPA recommends that the state first identify any additional potential measures not previously identified for the area, and then analyze any new or additional measures that the state has not already adopted in a previous attainment plan for the area.

In addition, a state may include in the CAA section 189(d) plan control strategy for the area any control measures triggered as contingency measures after the area failed to attain the $PM_{2.5}$ NAAQS by the applicable attainment date. In order to be included as control measures that will help the area meet its requisite minimum 5 percent reductions in direct $PM_{2.5}$ emissions or in emissions of any one $PM_{2.5}$ plan precursor, such measures would have to meet the same requirements as all other approvable control measures for being quantifiable, enforceable, replicable and accountable. The EPA believes that reliance on triggered contingency measures may be appropriate given the short timeline provided for in the statute for states to revise and submit their SIP revisions (12 months from the missed attainment date) and the fact that the contingency measures included in the prior attainment plan for the area under CAA section 172(c)(9) must be activated once the EPA publishes its finding of the area's failure to attain the NAAQS by the applicable attainment date. As explained previously, however, the EPA interprets the statute to require that any new 189(d) submission must meet all the statutory requirements applicable to all submissions, including the requirement to identify contingency measures. Thus, if contingency measures from the Serious area attainment plan are relied on in the new attainment demonstration as part of the control strategy, then the state must submit additional contingency measures for the CAA section 189(d) attainment plan. *See* 40 CFR 51.1003(c)(1)(vii).

5. Control Strategy Submission Requirements

To ensure that attainment plan submissions contain the necessary supporting information for the EPA to review and approve the state's new control strategy to achieve at least 5 percent annual reductions in emissions of direct $PM_{2.5}$ or any $PM_{2.5}$ plan precursor, the final rule requires that a state must submit information about the new control strategy for an area subject to section 189(d) in a manner consistent with the requirements described in section VI.D.3.

As with other $PM_{2.5}$ attainment plan submissions, the EPA believes that it is incumbent on the state to ensure that the information needed for the EPA to evaluate the state's analysis of new control measures—which in the case of 189(d) plans is also needed to achieve annual 5 percent reductions—is presented separately as part of the control strategy analysis, and in a format that provides transparency, consistency and the ability for another party to evaluate the state's analysis effectively and to duplicate the state's results. For this reason, the EPA is including the CAA section 189(d) plan base year emissions inventory information as a necessary part of the control strategy submission and as one element of the state's CAA section 189(d) plan due 12 months after the missed attainment date for the area. In addition, the state must provide information as part of any attainment plan submitted to meet the requirements of CAA section 189(d) consistent with the criteria described in Section VI.D.5 of this preamble to ensure that a state adopts effective regulations to implement the control measures identified as being needed to meet those requirements. Specifically, all control measures must be quantifiable, enforceable, replicable and accountable.

E. Modeling for Attainment Demonstrations

Section 189(d) of the CAA requires a state with a Serious nonattainment area that failed to attain the relevant NAAQS by the applicable Serious area attainment date to submit a new attainment plan for such area within 12 months after the missed attainment date. The same general requirements for attainment demonstrations and modeling that apply to Moderate area plans and Serious area plans due under CAA sections 189(a) and 189(b) should also apply to CAA section 189(d) attainment plans. However, the EPA is including additional requirements in the final rule specific to plans submitted pursuant to CAA section 189(d), as described in the following sections.

1. Attainment Demonstrations for Serious Areas That Fail To Attain the NAAQS by the Applicable Attainment Date

a. Summary of Proposal. The EPA proposed attainment demonstration modeling requirements for Serious areas that fail to attain the NAAQS by the applicable attainment date. *See* Section VI.E of this preamble, for more details on Serious area attainment demonstrations.

b. Final Rule. The final rule requirements are unchanged from the proposal with respect to this requirement. Attainment demonstrations for Serious areas subject to CAA section 189(d) requirements must consist of: (i) Technical analyses such as base year and future year modeling of emissions that identify sources and quantify their emissions that are contributing to violations of the $PM_{2.5}$ NAAQS; (ii) analyses of future year projected emissions reductions and air quality improvement resulting from national, regional and local programs already implemented as part of previous Moderate and/or Serious area attainment plans for the area (including reasonable control measures, BACM and BACT and additional feasible measures), and (iii) additional measures needed for expeditious attainment, including measures needed to achieve 5 percent emissions reductions on an annual basis. Each state with a nonattainment area subject to the requirements of CAA section 189(d) must submit an attainment plan with an attainment demonstration that includes analyses supporting the state's determination of its proposed new attainment date. In all cases, the state must show that the area will attain the NAAQS as expeditiously as practicable.

c. Comments and Responses. Any comments received on this section are addressed in the Response to Comments document found in the docket for this action.

2. Air Quality Modeling Required for Serious Areas Subject to the Requirements of CAA Section 189(d)

a. Summary of Proposal. The EPA proposed that states are required to submit air quality modeling in support of an attainment demonstration for a nonattainment area subject to the requirements of CAA section 189(d).

b. Final Rule. The final rule requirements are unchanged from the proposal with respect to this issue. States are required to submit air quality modeling in support of an attainment demonstration for a Serious nonattainment area subject to the requirements of CAA section 189(d). The modeling demonstration must show how and when the area will attain the NAAQS. Other than the timing of plan submissions and requirement to achieve 5 percent emissions reductions in direct $PM_{2.5}$ or any $PM_{2.5}$ plan precursor, the relevant air quality modeling procedures and guidance for all $PM_{2.5}$ nonattainment area plans are the same. *See* Sections IV.E. and VI.E of this preamble for more details on proposed modeling requirements and guidance for Moderate and Serious $PM_{2.5}$ nonattainment areas, respectively.

c. Comments and Responses. Any comments received on this section are addressed in the Response to Comments document found in the docket for this action.

3. Future Year(s) To Be Modeled in Attainment Demonstrations

a. Summary of Proposal. The EPA proposed that a state performing a modeling analysis for a plan submitted under CAA section 189(d) must select a future modeling year such that all emissions control measures relied on for attainment will have been implemented by the beginning of that calendar year. To demonstrate attainment, the modeling results for the nonattainment area must predict that emissions reductions implemented by the beginning of the last calendar year preceding the attainment date will result in $PM_{2.5}$ concentrations that meet the level of the standard.

b. Final Rule. As discussed more fully in Section VII.I of this preamble, the EPA must establish a new attainment date for a $PM_{2.5}$ nonattainment area subject to CAA section 189(d) and must do so according to the provisions of CAA sections 179(d)(3) and 172(a)(2), which require that the new attainment date must be as expeditious as practicable, but no later than 5 years from the date of publication in the **Federal Register** of the EPA's determination that the area failed to attain the relevant NAAQS. In addition, the EPA may extend the attainment date by up to 5 additional years (thus up to 10 years from the date of publication of the notice of finding of failure to attain by the applicable attainment date for the area) if the EPA deems it appropriate "considering the severity of nonattainment and the availability and feasibility of pollution control measures."

For purposes of determining the attainment date that is as expeditious as practicable, the state must conduct future year modeling that takes into account emissions growth, known controls (including any controls that were previously determined to be RACM and RACT, BACM and BACT, and MSM if appropriate, for the area), the 5 percent per year emissions reductions required by CAA section 189(d), plus any other emissions controls that are needed for expeditious attainment of the NAAQS. A state performing a modeling analysis for a plan submitted under CAA section 189(d) must select a future modeling year such that all emissions control measures relied on for attainment will have been implemented by the beginning of that year. To demonstrate attainment, the modeling results for the nonattainment area must predict that emissions reductions implemented by the beginning of the last calendar year preceding the attainment date will result in $PM_{2.5}$ concentrations that meet the level of the standard.[194]

For a $PM_{2.5}$ nonattainment area subject to CAA section 189(d), the state must adopt any control measures necessary to demonstrate expeditious attainment within 5 years of the area failing to attain the NAAQS by the applicable Serious area attainment date.

c. *Comments and Responses.* Any comments received on this section are addressed in the Response to Comments document found in the docket for this action.

4. Attainment Year Motor Vehicle Emissions Budgets

As with all other $PM_{2.5}$ NAAQS attainment plans, the transportation conformity rule requires that attainment plans for areas subject to CAA section 189(d) establish motor vehicle emissions budgets for the area's attainment year. Therefore, for such an area, the state would first determine the new attainment date as described in Section VII.I of this preamble. Once an area's attainment date has been established, the state would establish motor vehicle emissions budgets for direct $PM_{2.5}$ and any relevant $PM_{2.5}$ precursor for the attainment year.[195] A motor vehicle emissions budget for the purposes of a $PM_{2.5}$ attainment plan is that portion of the total allowable emissions within the nonattainment area allocated to on-road sources as defined in the submitted attainment plan.[196] Such motor vehicle emissions budgets would be calculated using the latest planning assumptions and the latest approved motor vehicle emissions model available at the time that the attainment plan is developed, unless the EPA approves the state's use of an alternative model.[197]

F. RFP Requirements

1. Specific Requirements

a. Summary of the Proposal. The EPA proposed to determine that a state has satisfied the RFP requirement if the state submits an approvable control strategy under CAA section 189(d) that demonstrates that the state will achieve at least 5 percent reductions in direct $PM_{2.5}$ or $PM_{2.5}$ precursor emissions from sources in the area annually until attainment. Additionally, the EPA proposed that motor vehicle emissions budgets must also be established as part of any RFP plan for direct $PM_{2.5}$ and for any relevant $PM_{2.5}$ plan precursor using the latest planning assumptions and the latest approved motor vehicle emissions model available at the time that the plan is developed for a Serious area subject to 189(d).[198]

b. Final Rule. The EPA is finalizing RFP requirements for attainment plans required pursuant to CAA section 189(d) that are similar to other Serious area RFP requirements discussed in section VI.F of this preamble. The EPA is providing similar guidance regarding how to prepare an RFP analysis, RFP projected emissions, geographic coverage of emission sources for RFP, and RFP requirements for multi-state nonattainment areas.

The RFP analysis must contain appropriate information to demonstrate that the state will achieve the emissions reductions from the control strategy necessary to result in generally linear reductions in emissions and provide for expeditious attainment as discussed in Section VII.D of this preamble. As with other Serious area RFP analyses, the state may consider $PM_{2.5}$ plan precursor emissions reductions in the aggregate for RFP purposes in a 189(d) area.

The state's RFP analysis must include three components: (1) An implementation schedule for control measures on sources in the nonattainment area, (2) RFP projected emissions for each applicable quantitative milestone year (discussed in Section VII.G of this preamble), based on the anticipated control measure implementation schedule; and (3) an analysis that demonstrates that this schedule of aggregate emissions reductions achieves sufficient progress toward attainment between the applicable baseline year to the attainment year. For additional discussion of each of the components of the RFP analysis, refer to Section IV.F of this preamble. *See* 40 CFR 51.1012(a).

In the proposal, the EPA proposed an option to require at least 5 percent emissions reductions in direct $PM_{2.5}$ and all $PM_{2.5}$ plan precursor from sources in the area annually until attainment to meet the separate RFP requirement for attainment plans. However, some commenters did not agree that EPA should consider an area meeting the 5 percent requirement under CAA section 189(d) to automatically have satisfied the RFP requirement. The EPA agrees with this comment and is therefore not finalizing an approach to the RFP requirement that is tied to the 5 percent requirement. Instead, the final RFP requirement will be tied to progress toward expeditious attainment (which the EPA recommends should be generally linear but may also be stepwise with appropriate justification), just as it is for all other types of Moderate and Serious area plans for $PM_{2.5}$ as summarized in the previous paragraph. The emissions reductions that a state achieves for purposes of meeting the 5 percent requirement may also be counted towards meeting the separate RFP requirement, but the EPA does not believe that meeting the 5 percent requirement would automatically equate to meeting the RFP requirement. That determination requires the separate evaluations required for the RFP analysis.

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[194] Note that for purposes of the $PM_{2.5}$ NAAQS, a determination of attainment (or failure to attain), which the EPA is required to make after the attainment date has passed, is based on an average of the most recent 3 years of ambient data prior to the area's attainment date.

[195] For more information on $PM_{2.5}$ precursor requirements, *see* CAA section 93.102(b)(2)(iv) and (v) of the transportation conformity rule. *See* also the May 6, 2005, final transportation conformity rule that addressed requirements for $PM_{2.5}$ precursors. (70 FR 24280).

[196] A state would also establish motor vehicle emissions budgets for an area's attainment year. Those budgets would be the motor vehicle emissions that the SIP establishes as being necessary to attain the NAAQS.

[197] If an area includes re-entrained road dust in the motor vehicle emissions budget, the latest approved version of AP–42 should be used unless the EPA has approved an alternative model for the area.

[198] *Ibid.*

The EPA requires that the applicable baseline year for the RFP analysis must be the same year as that represented by the latest base year inventory for the Serious area. The projected attainment date should be as expeditiously as practicable and is discussed further in Section VII.I of this preamble. The RFP analysis must clearly convey how the schedule for implementing the control strategy will provide for generally linear or stepwise progress towards attainment. If stepwise progress is more appropriate for the specific nonattainment area, the state is required to submit a clear rationale and supporting information to explain why generally linear progress towards attainment in the area is not appropriate (*e.g.*, due to the nature of the nonattainment problem, the types of sources contributing to $PM_{2.5}$ levels in the area, and the ability to perform timely implementation of control measures). Further, if a stepwise approach is needed, this does not relieve the state of the requirements of CAA section 189(d). As stated earlier, the EPA requires that a section 189(d) plan must include in its RFP analysis the anticipated emissions reductions expected to be achieved through the implementation of control measures required by the control strategy described in Section VII.D of this preamble. Further, the optional air quality analysis discussed in Section IV.F of this preamble is also available for use by a state preparing a section 189(d) plan.

Additionally, the EPA requires states to establish motor vehicle emissions budgets for direct $PM_{2.5}$ and $PM_{2.5}$ plan precursors using the latest planning assumptions and the latest approved motor vehicle emissions model available at the time that the 189(d) plan is developed.[199] *See* 40 CFR 51.1012(a).It is also important to note that if a section 189(d) area is multi-state or multi-jurisdictional, the states or jurisdictions comprising the area must provide a coordinated approach to meeting the RFP requirement for the shared area. For further information, *see* Section IV.F.5 of this preamble. *See* 40 CFR 51.1012(b).

c. Comments and Responses. Any additional comments received on RFP are addressed in the Response to Comments document found in the docket for this action.

G. Quantitative Milestones

1. Specific Requirements

a. Summary of the Proposal. The proposal indicated that quantitative milestones would need to be achieved every 3 years until the area attains the relevant NAAQS, similar to proposed requirements for Moderate area plans and other types of Serious area plans. In the proposal, the EPA stated that, at a minimum, quantitative milestones selected for an attainment plan submitted under CAA section 189(d) would need to demonstrate a reduction of at least 15 percent (*i.e.*, 5 percent for each year in the 3-year period) in emissions of direct $PM_{2.5}$ and $PM_{2.5}$ plan precursors below those emissions reported in the most recent inventory for the area. The proposal identified requirements for direct $PM_{2.5}$ and precursors, to be consistent with the RFP proposal. The EPA proposed that attainment plans developed pursuant to CAA section 189(d) would have to contain quantitative milestones beginning at 13.5 years or 16.5 years from designation (depending on whether the section 189(d) plan would be due before or after the 13.5 year mark), and every 3 years thereafter until the attainment date for the area.

The EPA also proposed that the requirements for quantitative milestones, described in Section VI.G of this preamble, should also apply to quantitative milestones submitted with any revised Serious area attainment plan pursuant to CAA section 189(d).

b. Final Rule. The revised attainment plan for any Serious nonattainment area that fails to attain the relevant $PM_{2.5}$ NAAQS by the applicable attainment date must include quantitative milestones pursuant to CAA section 189(c). These quantitative milestones should track the progress being made in the nonattainment area in the implementation of specific control measures in the SIP, and may potentially be in the form of metrics for tracking air quality improvement or emissions reductions over time. The EPA wishes to clarify that the quantitative milestones for a section 189(d) plan are designed to track RFP, not solely to track progress in achieving the minimum 5 percent annual emission reduction requirement in this section of the CAA. The RFP discussion in the previous section noted that in some cases, the state may need to adopt additional emission reduction measures (beyond those existing or new measures that will meet the 5 percent emission reduction requirement) in order for the plan to meet the overarching requirement to attain the standard as expeditiously as practicable. Thus, the RFP plan and quantitative milestones must be designed to track progress based on the overall set of control measures needed for expeditious attainment.

The quantitative milestones need to be achieved every 3 years until the area attains the relevant NAAQS. Therefore, at a minimum, the final rule requires that quantitative milestones selected for an attainment plan submitted under CAA section 189(d) need to track progress in the implementation of control measures required to achieve RFP in emissions reductions of direct $PM_{2.5}$ and/or all $PM_{2.5}$ plan precursors described in the previous section. The CAA section 189(d) plan must contain quantitative milestones to be achieved every 3 years, beginning with a milestone at either 13.5 years or 16.5 years from the area's date of designation. If the attainment plan is due prior to a date 13.5 years from designation of the area, then the plan shall contain milestones to be achieved by no later than a milestone date of 13.5 years from the date of designation of the area, and every 3 years thereafter, with the final milestone being the first 3-year milestone date falling after the applicable attainment date. If the attainment plan is due later than a date 13.5 years from designation of the area, then the plan shall contain milestones to be achieved by no later than a milestone date of 16.5 years from the date of designation of the area, and every 3 years thereafter, with the final milestone being the first 3-year milestone date falling after the applicable attainment date. *See* 40 CFR 51.1013(a)(3).

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[199] If an area includes re-entrained road dust in the motor vehicle emissions budget, the latest approved version of AP–42 should be used unless the EPA has approved an alternative model for the area.

The EPA is also finalizing that the requirements for quantitative milestones described in Section VI.G of this preamble shall also apply to quantitative milestones submitted with any revised attainment plan pursuant to CAA section 189(d), including but not limited to, the construction, content, reporting requirements and a quantitative milestone that specifically tracks implementation of control measures identified in the plan to attach the standard as expeditiously as practicable. *See* 40 CFR 51.1013(a)(3).

c. Comments and Responses. Any additional comments received on quantitative milestones are addressed in the Response to Comments document found in the docket for this action.

H. Contingency Measures

1. Summary of the Proposal

The EPA proposed that contingency measures for attainment plans under CAA section 189(d) for Serious areas that fail to attain the NAAQS by the applicable attainment date must meet the same criteria as contingency measures for a Serious area attainment plan outlined in Section VI.H of this preamble. The EPA also proposed that the contingency measures should achieve approximately 1 year's worth of emissions reductions.

2. Final Rule

All $PM_{2.5}$ attainment plans, including plans for areas subject to CAA section 189(d), must contain contingency measures that are consistent with CAA section 172(c)(9). Section VI.H of this preamble describes the EPA's criteria for contingency measures for a Serious area attainment plan, and contingency measures for a section 189(d) plan must meet the same criteria. The final rule reiterates the EPA's longstanding policy that contingency measures should provide for emissions reductions approximately equivalent to 1 year's worth of reductions needed for RFP.

The statutory contingency measure requirement at CAA section 172(c)(9) is not superseded or subsumed by any requirement under subpart 4. Thus, contingency measures are required as part of a state's attainment plan submission under section 189(d). Accordingly, the final rule requires the criteria for identifying and selecting contingency measures for a section 189(d) submission that are the same as for Moderate or Serious area attainment plans.

Specifically, the EPA is finalizing that the following requirements must be met in order for contingency measures to be approvable as part of a state's attainment plan submission for purposes of section 189(d):

(1) Contingency measures must be fully adopted rules or control measures that are ready to be implemented quickly upon a determination by the Administrator of the nonattainment area's failure to meet RFP, failure to meet any quantitative milestone, failure to submit a quantitative milestone report or failure to meet the standard by the applicable attainment date.

(2) The SIP must contain trigger mechanisms for the contingency measures, specify a schedule for implementation, and indicate that the measures will be implemented without significant further action by the state or by the EPA.

(3) Contingency measures should consist of control measures that are not otherwise included in the control strategy for the SIP, or that achieve emissions reductions not otherwise relied upon in the control strategy for the area.

(4) Contingency measures should provide for emissions reductions equivalent to 1 year's share of reductions needed to demonstrate attainment (*i.e.*, the overall needed reductions divided by the number of years from the base year to the attainment year), or approximately equivalent to 1 year's worth of air quality improvement or emissions reductions proportional to the overall amount of air quality improvement or emissions reductions to be achieved by the area's attainment plan.

The EPA is also finalizing its proposal to allow a state to rely on contingency measures that achieve emissions reductions on sources located outside the nonattainment area, but within the state provided that the measures on sources outside the designated nonattainment area are demonstrated to produce the appropriate air quality impact within the nonattainment area.

As with contingency measures for Moderate or Serious areas, the EPA allows a state under these circumstances to rely on additional reductions from federal or local measures already scheduled for implementation as part or all of their contingency measures. The EPA could consider such measures as meeting the contingency measure requirement as long as they produce emissions reductions in excess of those required to meet other statutory nonattainment provisions (*e.g.*, such as to meet BACM/BACT requirements) and they can be relied on to achieve a sufficient portion of the actual emissions reductions necessary to reduce emissions in the area while the state develops a new plan to bring the area into attainment.[200] As with contingency measures for Moderate area or Serious area attainment plans, the EPA requires that the emissions reductions associated with contingency measures for attainment plans under section 189(d) should be approximately equivalent to 1 year's worth of emissions reductions necessary to achieve RFP for the area, unless the state adequately demonstrates that some smaller amount of reductions is appropriate while the state is revising its attainment plan for the area. *See* 40 CFR 51.1014(b)(2).

The EPA recognizes that identifying contingency measures for a Serious $PM_{2.5}$ nonattainment area that failed to attain the relevant NAAQS by the applicable attainment date may be challenging for a state that should already have fully implemented all control measures identified as "reasonable" and "best," and potentially "most stringent," in addition to any new control measures to achieve the requisite minimum 5 percent reductions in direct $PM_{2.5}$ or $PM_{2.5}$ plan precursor emissions necessary for expeditious attainment. However, for an area that has not implemented MSM, states could identify potential contingency measures by reviewing attainment plans for other nonattainment areas. The state should also reevaluate control measures that were identified previously as technologically or economically infeasible for the area, or otherwise removed from consideration as part of the RACM/RACT or BACM/BACT process. Additionally, states can review other sources of control measure information, such as the RBLC (a central database of air pollution control technology information) and the EPA's Menu of Control Measures document available at *http://www3.epa.gov/ttn/naaqs/pdfs/MenuOfControlMeasures.pdf. See* 40 CFR 51.1014.

3. Comments and Responses

Comment: Commenters stated that because 189(d) requires annual emissions reductions of not less than 5 percent, then the EPA cannot assume that 1 year's worth of emissions reductions will be *no greater than* 5 percent. The commenter stated that only if an area shows that the 5 percent reduction requirement of CAA section 189(d) is greater than what would be necessary to demonstrate RFP annually may an area assume that contingency measures must achieve only the 5 percent target.

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[200] *See LEAN* v. *EPA,* 382 F.3d 575 (5th Cir. 2004).

Response: The EPA agrees with the commenters. As discussed earlier and in Sections IV.H and VI.H of this preamble, contingency measures should equal approximately 1 year's worth of emissions reductions necessary to achieve RFP for the area. The EPA notes that RFP might require more than the 5 percent emissions reductions required by CAA section 189(d). Therefore, if contingency measures should equal approximately 1 year's worth of emissions reductions necessary to achieve RFP, then those contingency measures should provide more than 5 percent of emissions reductions in direct $PM_{2.5}$ or aggregate $PM_{2.5}$ plan precursors.

Comment: Commenters suggested that, similar to the ozone program, the EPA should consider whether the contingency measures for an area that failed to attain by the deadline for Serious areas could anticipate the development of proven new technology, with a requirement to add further contingency measures if such technology does not develop as anticipated.

Response: The EPA disagrees with the commenters, noting that CAA section 182(e)(5) provides this flexibility for Extreme areas that are nonattainment for the ozone NAAQS. That section of the Act falls within subpart 2 of part D, which identifies additional contingency measure provisions applicable only in ozone nonattainment areas. Subpart 4 does not contain a provision similar to that in subpart 2. Therefore, CAA section 172(c)(9) applies and, as explained earlier, that provision requires contingency measures be included in the attainment plan.

Comment: Commenters requested the EPA to allow a state to demonstrate, in the alternative, that its contingency measures will achieve a 5 percent reduction in $PM_{2.5}$ ambient concentrations, and that such reductions can be obtained by reducing direct $PM_{2.5}$ emissions, emissions of one or more precursors, or both.

Response: The EPA is finalizing the optional air quality analysis as an additional component of the RFP plan, as previously discussed in Section IV.F of the preamble. Therefore, although the state could demonstrate that its contingency measures will achieve a 5 percent reduction in $PM_{2.5}$ ambient concentrations, the EPA notes that this optional analysis does not relieve the requirements of 189(d). Specifically, the area remains required to achieve an emissions reduction of not less than 5 percent of direct $PM_{2.5}$ or any $PM_{2.5}$ plan precursor.

I. Attainment Dates

1. Summary of the Proposal

The proposed rule indicated that the new attainment date for an area that failed to attain by the Serious area attainment date would be governed by sections 172(a)(2) and 179(d)(3) of the CAA. Under the proposal, the attainment date would be as expeditiously as practicable, but no later than 5 years from the date of publication in the **Federal Register** of the EPA's determination that the area failed to attain the relevant NAAQS. The EPA may extend the attainment date by up to 5 additional years based on certain criteria.

2. Final Rule

As described in the proposal, the final rule includes the overarching requirement for a Serious area that failed to attain by the previous attainment date to establish a new date for attaining the standard as expeditiously as practicable. However, neither CAA section 189(d) nor other sections in subpart 4 explicitly establish or provide the authority to establish a new attainment date for the area. Therefore, once an area is beyond the attainment dates that Congress specified in subpart 4 for the PM_{10} NAAQS, the EPA must look to other provisions of part D of the CAA to provide authority for a new attainment date. Sections 179(d)(3) and 172(a)(2) of the CAA provide generally applicable attainment dates that fill the gap in the statute left for areas subject to the requirements of CAA section 189(d). Thus, for a $PM_{2.5}$ nonattainment area subject to CAA section 189(d) requirements, the EPA must establish a new attainment date according to the provisions of CAA section 179(d)(3) and 172(a)(2). The EPA has followed this same approach in the past for PM_{10} nonattainment areas governed by subpart 4 nonattainment requirements.[201]

Applying these provisions, the final rule therefore provides that the new attainment date in a CAA section 189(d) plan must be as expeditious as practicable, but no later than 5 years from the date of publication in the **Federal Register** of the EPA's determination that the area failed to attain the relevant NAAQS. The EPA may extend the attainment date by up to 5 additional years (thus to 10 years from the date of publication of the notice of finding of failure to attain by the applicable attainment date for the area) if the agency deems it appropriate "considering the severity of nonattainment and the availability and feasibility of pollution control measures." For a $PM_{2.5}$ nonattainment area subject to CAA section 189(d), the EPA expects that the state will adopt any control measures necessary to demonstrate expeditious attainment within 5 years of the area failing to attain the NAAQS by the applicable Serious area attainment date. The EPA will consider the state's proposed attainment date for the area based on its revised attainment demonstration and modeling of its updated control strategy, and other relevant facts and circumstances for the area, in order to identify the most expeditious attainment date practicable for the area.

3. Comments and Responses

Comment: Some commenters stated that the EPA should set a date that is as expeditious as practicable, but if it takes longer than 10 more years to attain, the EPA may approve such a plan, as long as the minimum 5 percent reduction requirement is met. The commenter stated that this is the plain meaning of CAA section 189(d)'s reference that the plan shall provide for at least 5 percent reductions "from the date of such submission until attainment."

Response: The EPA does not agree with the commenter. As indicated earlier, the EPA's longstanding interpretation is that the statutory provisions of CAA sections 172(c)(2) and 179(d)(3) govern the attainment date for new plans required under CAA section 189(d) for Serious areas that previously fail to attain by the Serious area attainment date. Under certain circumstances, these provisions would allow for an attainment date up to 10 years from the effective date of a finding of failure to attain, but would not allow for an attainment date longer than that.

VIII. NNSR Requirements for $PM_{2.5}$ Nonattainment Areas

A. Background

1. Statutory Requirements for NSR

Section 110(a)(2)(C) of the CAA requires states to include in their SIPs a preconstruction review permitting program that regulates the construction and modification of stationary sources as necessary to ensure that NAAQS are achieved. To address the regulation of the larger pollutant-emitting sources (defined as major stationary sources), Congress provided specific permitting requirements in the CAA in parts C and D of title I. The requirements for preconstruction permits under parts C and D of the CAA are commonly known collectively as the major NSR program because they apply specifically to the preconstruction review and permitting of new major stationary sources and major modifications at existing sources. As explained in Sections VIII.A.1.a and b of this preamble, the preconstruction review of each proposed new major stationary source and major modification generally is carried out on a pollutant-specific basis and the permitting requirements with regard to each pollutant apply based on whether the area in which the proposed major source or major modification would locate is designated attainment (or unclassifiable) or nonattainment for that pollutant at the time the permit is issued.

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[201] For example, *see* the **Federal Register** notice from June 6, 2007 (72 FR 31183) in which the EPA found that the Phoenix PM_{10} Serious nonattainment area failed to attain the standard by the 2006 attainment date.

a. Prevention of Significant Deterioration. Part C of title I of the CAA (hereafter referred to simply as part C) contains implementation plan requirements that apply to new major stationary sources and major modifications locating in areas designated attainment or unclassifiable for any NAAQS. These requirements constitute the Prevention of Significant Deterioration (PSD) program. Pursuant to part C, the EPA has adopted PSD regulations at 40 CFR 51.166 (minimum requirements for an approvable state PSD program in the SIP) and 40 CFR 52.21 (the federal PSD program, applicable in areas where the state does not have an EPA-approved PSD program in its SIP).[202] The EPA last amended the PSD regulations for $PM_{2.5}$ on January 15, 2013, in the final rule revising the $PM_{2.5}$ NAAQS.[203] This final rule does not relate to the PSD program, nor does it amend the PSD regulations.

b. Nonattainment New Source Review. Part D of title I of the CAA (hereafter referred to as part D) contains implementation plan requirements for nonattainment areas, which include the requirements for permitting new major stationary sources and major modifications locating in designated nonattainment areas, referred to as the Nonattainment New Source Review (NNSR) program. As noted earlier, part D contains several subparts that include various requirements for addressing nonattainment areas. Subpart 1 addresses plan requirements for nonattainment areas generally, including CAA section 172(c)(5), which requires preconstruction and operating permits for new major stationary sources and major modifications locating in nonattainment areas. Section 173 of the CAA outlines the minimum statutory requirements for a state's NNSR permit program and serves as the basis for the EPA's NNSR regulations for $PM_{2.5}$ as promulgated in the 2008 $PM_{2.5}$ NSR Rule published at 73 FR 28321, May 16, 2008. Subpart 4 was added to part D as part of the 1990 CAA Amendments and includes additional plan provisions for designated PM_{10} nonattainment areas. Relevant here, CAA section 189(a)(1)(A) of subpart 4 requires states to include in their implementation plan a permit program addressing major stationary sources of PM_{10} that meets the requirements under CAA section 173 of subpart 1. Subpart 4 also includes some additional preconstruction review requirements, which, until the court's decision in *NRDC* v. *EPA,* the EPA has only applied to major sources of PM_{10} located in PM_{10} nonattainment areas. The specific NNSR requirements contained in both subparts 1 and 4 are described later, including the changes that we are making in this final rule to the NNSR regulations to address these requirements with respect to $PM_{2.5}$.

2. Federal NNSR Regulations

The EPA has adopted numerous NNSR regulations in 40 CFR parts 51 and 52, including § 51.165; part 51 Appendix S; and § 52.24. An approvable NNSR program in a state's implementation plan must, at a minimum, meet the applicable program requirements set forth in the federal NNSR provisions at 40 CFR 51.165, which for $PM_{2.5}$ have been based on changes to that section made by the 2008 $PM_{2.5}$ NSR Rule. States with designated nonattainment areas for a particular pollutant are required to adopt regulations consistent with those applicable plan requirements, including any subsequent rule changes that the EPA may make, and submit them to the EPA for approval as part of their SIP within a period of time consistent with the schedule prescribed by the CAA or the EPA, as appropriate.

The EPA interprets the requirement established under section 110(a)(2)(C) of the CAA that states regulate the construction and modification of sources to apply as of the effective date of an area's designation to nonattainment for a given pollutant.[204] Although CAA section 110(a)(2)(C) does not contain specific requirements a state must follow for issuing major source permits during the interim period between effective date of designation and the date when the EPA approves a state's NNSR program to address a given pollutant, the EPA regulations at 40 CFR 52.24(k) authorize states to apply 40 CFR part 51, Appendix S, known as the Emission Offset Interpretative Ruling or simply the Offset Ruling, during the interim period.[205] [206]

Accordingly, states with newly designated nonattainment areas for the revised primary $PM_{2.5}$ NAAQS have two possible means by which they can implement NNSR requirements for $PM_{2.5}$ following the effective date of designations and until the EPA approves a SIP submission meeting the NNSR requirements for $PM_{2.5}$ promulgated in this rule. First, any state that already has a SIP-approved NNSR program for $PM_{2.5}$ (*e.g.,* where the state has had other $PM_{2.5}$ nonattainment areas for which the EPA has approved an NNSR program) should continue to apply those permitting requirements in the interim. Second, any state that lacks an approved NNSR program for $PM_{2.5}$ may rely upon the NNSR provisions in Appendix S until the EPA approves that state's SIP submission in order to ensure that proposed new major stationary sources and major modifications for $PM_{2.5}$ in newly designated $PM_{2.5}$ nonattainment areas undergo the appropriate type of preconstruction review in the interim.

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[202] The federal PSD program enables the EPA or a state that has been delegated authority by the EPA to issue PSD permits.

[203] More information on the PSD requirements for $PM_{2.5}$ as well as the public comments and the EPA's responses to those comments is contained in the January 15, 2013 **Federal Register** document (78 FR 3086, beginning at page 3251).

[204] *See* the EPA's final rule to implement certain aspects of the 1990 CAA Amendments relating to NSR and PSD, published in the **Federal Register** on November 29, 2005 (70 FR 71612, 71677 and 71678).

[205] States with designated $PM_{2.5}$ nonattainment areas for the 1997 and 2006 $PM_{2.5}$ standards were required to submit SIPs, including a NNSR program satisfying the requirements of the 2008 $PM_{2.5}$ NSR Rule, by May 16, 2011, 3 years from the date of publication of that 2008 rule. *See* 73 FR 28321 (May 16, 2008), at page 28342. States must continue to implement those approved state programs to issue permits to new major stationary sources and major modifications until the state's revised program containing the subpart 4 NNSR provisions promulgated in this rulemaking is approved under the applicable SIP.

[206] Appendix S was originally promulgated in 1976 to address whether, and to what extent, new and modified sources would be allowed to construct in nonattainment areas whose attainment deadlines had already passed, in light of the regulatory requirement that applications for construction permits for new or modified sources be disapproved where the source would interfere with attainment of the NAAQS, *see* 41 FR 55524 (December 21, 1976). When Congress added the part D provisions in the 1977 CAA Amendments, it also added the requirement that SIPs contain NNSR provisions as set forth in Part D. Additionally, Congress provided that Appendix S would govern preconstruction permitting in nonattainment areas lacking approved part D SIPs before a construction ban went into effect. When Congress removed the construction ban via the 1990 CAA Amendments (except as provided for in CAA section 110(n)(3)), it left in place the use of the interim NNSR program under Appendix S.

a. General Applicability. Stationary sources are considered to be "major" sources based on the amount of a given pollutant (or a precursor for that pollutant) the source emits or has the potential to emit, as defined by the statute. New major stationary sources are subject to the NNSR requirements when they are major for the pollutant (or a precursor for that pollutant) for which an area is designated nonattainment. *See* 40 CFR 51.165(a)(2)(i). With regard to major modifications, NNSR applies to proposed physical changes or changes in the method of operation of an existing stationary source that (1) is major for the nonattainment pollutant (or a precursor for that pollutant) and (2) results in both a significant emissions increase and a significant net emissions increase of that same nonattainment pollutant (or same precursor for that pollutant).[207]

For each proposed new major stationary source and major modification, the general NNSR requirements to be included in a state's SIP include the following: (i) The installation and continuous operation of pollution control technology that complies with the Lowest Achievable Emission Rate (LAER); (ii) the acquisition of creditable emissions reductions to adequately offset the proposed emissions increase of the nonattainment pollutant; and (iii) a certification that all other sources owned by the applicant are complying with all applicable requirements of the CAA.[208] These NNSR requirements apply as of the effective date of the designation of an area as nonattainment for the pollutant and must be satisfied by a proposed major new source or major modification locating in such area as a prerequisite for obtaining a NNSR permit.

b. Historical Overview of NNSR for PM_{10} and $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS). The EPA revised the PM NAAQS in 1997, establishing new annual and 24-hour NAAQS using $PM_{2.5}$ particles as a new indicator, while retaining the NAAQS for PM_{10}.[209] In 2006, the EPA again revised the suite of PM NAAQS by tightening the 24-hour $PM_{2.5}$ standards and retaining the level of the annual $PM_{2.5}$ standards.[210] In 2008, the EPA issued the $PM_{2.5}$ NSR Rule that established various provisions ensuring that proposed new major stationary sources or major modifications of sources of direct $PM_{2.5}$ emissions or emissions of applicable $PM_{2.5}$ precursors would be required to undergo preconstruction review.[211] The EPA included specific provisions in the 2008 $PM_{2.5}$ NSR Rule that apply when such sources are located in a designated $PM_{2.5}$ nonattainment area. Unlike the NNSR requirements for PM_{10} developed under subpart 4, the EPA determined that the applicable implementation requirements for the $PM_{2.5}$ NAAQS were limited to the general nonattainment provisions under subpart 1.

With regard to NSR applicability for $PM_{2.5}$ precursors in the 2008 $PM_{2.5}$ NSR Rule, the EPA recognized that, under the appropriate conditions, NO_X, SO_2, VOC and ammonia could each contribute to the formation of $PM_{2.5}$ in the ambient air. However, the EPA issued regulations that did not require states to subject all of these precursors to regulation as part of the attainment plan or NSR permitting requirements applicable in a given nonattainment area.[212] Instead, the EPA established the initial presumptions for nonattainment areas that SO_2 and NO_X should be regulated precursors for $PM_{2.5}$, but VOC and ammonia need not be regulated precursors.[213]

As described in Section II.B of this preamble, in January 2013 the court's decision in *NRDC* v. *EPA* held that the EPA erred in implementing the $PM_{2.5}$ NAAQS under the general implementation requirements in subpart 1, rather than relying on the implementation requirements specific to PM_{10} in subpart 4 of the CAA. Accordingly, the court directed the EPA to comply with the requirements of subpart 4 when developing implementing regulations for $PM_{2.5}$ nonattainment areas.

The *NRDC* decision has specific implications for implementing the NNSR program for $PM_{2.5}$. Two provisions of subpart 4 impose additional requirements on NNSR plans developed to address sources locating in areas designated nonattainment for $PM_{2.5}$. The first relates to the definition of "major stationary source" that applies to areas initially designated as Moderate nonattainment areas and subsequently reclassified as Serious. In such areas, section 189(b)(3) of the CAA defines the major source threshold as 70 tpy of PM_{10}. The second relevant subpart 4 provision governs the treatment of major sources of PM_{10} precursors. As previously described in Section III of this preamble, section 189(e) of the CAA requires that the control requirements applicable to major stationary sources of PM_{10} also apply to major stationary sources of PM_{10} precursors, unless the Administrator determines that such sources of PM_{10} precursors do not contribute significantly to PM_{10} levels that exceed the standard in that area. The EPA's proposed amendments to address the subpart 4 requirements with respect to $PM_{2.5}$ and the EPA's responses to comments received on its proposal are summarized in the relevant subsections later.

It is worth noting that the 2008 $PM_{2.5}$ NSR Rule promulgated new NSR requirements for implementation of $PM_{2.5}$ in both nonattainment areas (NNSR) and attainment/unclassifiable areas (PSD). As subpart 4 includes requirements only pertinent to nonattainment areas, the EPA does not consider the portions of the 2008 $PM_{2.5}$ NSR Rule that address requirements for $PM_{2.5}$ attainment and unclassifiable areas to be affected by the court's opinion in *NRDC* v. *EPA*. Therefore, the EPA did not propose to revise any PSD requirements promulgated in the 2008 $PM_{2.5}$ NSR Rule in order to comply with the court's decision.

B. Final NNSR Requirements for $PM_{2.5}$ Nonattainment Areas

This section provides a description of the changes that the EPA is making to the NNSR requirements for $PM_{2.5}$ that are contained in 40 CFR 51.165, which provides the minimum requirements for a NNSR program under an approved implementation plan, and in Appendix S, which serves as an interim NNSR permitting program pending approval of a state's SIP to address NNSR requirements for a particular pollutant.

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[207] *See* 40 CFR 51.165(a)(1)(v)(A), (a)(2)(ii)(A). As will be explained in ensuing discussions, the nonattainment pollutant and any applicable precursors for that pollutant are considered separately for NNSR applicability purposes.

[208] The basic NNSR requirements are set forth in CAA section 173 of subpart 1. Subpart 4 adds a more stringent definition of "major source" for PM_{10} sources locating in PM_{10} nonattainment areas classified as Serious and sets forth provisions for the regulation and potential exemption from regulation of major sources of PM_{10} precursors in PM_{10} nonattainment areas. Until the decision in *NRDC* v. *EPA* was issued, the additional subpart 4 requirements had not been directly applied to $PM_{2.5}$.

[209] *See* 62 FR 38652 (July 18, 1997).

[210] *See* 71 FR 61144 (October 17, 2006).

[211] *See* 73 FR 28321 (May 16, 2008).

[212] *See* 72 FR 20589.

[213] In the 2008 $PM_{2.5}$ NSR Rule, the EPA concluded that SO_2 should be regulated as a precursor for $PM_{2.5}$ in all areas. In addition, the EPA or the states could rebut the initial presumptions regarding NO_X, VOC or ammonia on an area-by-area basis with a demonstration approved by the Administrator and thus reverse any of those presumptions in the state's implementation plan for that area. *See* 73 FR 28327.

For both sets of regulations, we will describe the changes that were proposed, the final requirements, the comments received, and the EPA's responses to them.

1. 40 CFR 51.165

In this final rule, as explained in more detail later, the EPA is making the following revisions that affect the NNSR regulations for $PM_{2.5}$ at 40 CFR 51.165: (a) Amending the definition of "regulated NSR pollutant" with regard to $PM_{2.5}$ precursors; (b) amending the definition of "major stationary source" with regard to major sources of direct $PM_{2.5}$ emissions and $PM_{2.5}$ precursors locating in $PM_{2.5}$ nonattainment areas classified as Moderate and Serious; (c) amending the definition of "significant" with regard to emissions of $PM_{2.5}$ precursors; and (d) codifying the EPA's policy for determining whether a source is "major" for $PM_{2.5}$ with regard to emissions of direct $PM_{2.5}$ and its precursors.

Also, the EPA explains in this section that it is codifying the schedule for states to submit NNSR SIP revisions for $PM_{2.5}$ that meet the requirements of 40 CFR 51.165. The schedules for submitting revised NNSR programs for $PM_{2.5}$ for Moderate and Serious areas are not contained in 40 CFR 51.165 NNSR regulations but in new 40 CFR 51.1003(a) and (b), respectively.

a. Definition of "regulated NSR pollutant"—$PM_{2.5}$ Precursors

i. Summary of Proposal

CAA section 189(e) requires that the control requirements applicable to major stationary sources of PM_{10} also apply to major stationary sources of PM_{10} precursors, unless the Administrator determines that such sources of PM_{10} precursors do not contribute significantly to PM_{10} levels that exceed the standard in that area. In order to align the NNSR regulations for $PM_{2.5}$ with the requirements of CAA section 189(e), the EPA proposed several amendments to certain definitions within 40 CFR 51.165, as explained in the subsections that follow, in order to regulate all four identified $PM_{2.5}$ precursors consistent with the statute.[214] The EPA proposed to revise the NNSR definition of "regulated NSR pollutant" to include SO_2, NO_X, VOC and ammonia as regulated $PM_{2.5}$ precursors.

The EPA also proposed to add language to the definition of "regulated NSR pollutant" to address the provision of CAA section 189(e) that allows an exemption from the NNSR permit requirements for major stationary sources or major modifications of a particular precursor if the state demonstrates to the satisfaction of the EPA that major stationary sources of such precursor do not contribute significantly to $PM_{2.5}$ levels that exceed the $PM_{2.5}$ ambient standards in a particular nonattainment area. In Section III of the preamble of the proposal, the EPA proposed and sought comment on several policy approaches that a state could use to make the necessary demonstration that would enable the state to exempt sources of a particular precursor from being regulated under the attainment plan for a particular $PM_{2.5}$ nonattainment area altogether or from individual components of that plan, including the NNSR permitting requirements. *See* 80 FR 15350–62.

ii. Final Rule

The EPA is amending the definition of "regulated NSR pollutant" at 40 CFR 51.165 to include a new provision stating that SO_2, NO_X, VOC and ammonia are $PM_{2.5}$ precursors in any $PM_{2.5}$ nonattainment area. *See* 40 CFR 51.165(a)(1)(xxxvii)(C)(*2*). The EPA is also providing in this final rule that sources of a particular precursor may be exempted from the NNSR control requirements via a demonstration approved by the Administrator showing that new major stationary sources and major modifications of a particular precursor would not contribute significantly to levels of $PM_{2.5}$ that exceed the standard in a particular nonattainment area. It is noted, however, that the exemption provision is not being codified within the definition of "regulated NSR pollutant" as originally proposed. Instead, this exemption provision is contained in a new paragraph 51.165(a)(13), which is based on CAA section 189(e) and provides generally that the control requirements applicable to new major stationary sources and major modifications of $PM_{2.5}$ are also applicable to new major stationary sources and major modifications of $PM_{2.5}$ precursors.

In addition, the provision has also been revised to focus on the exemption of control requirements for sources of a particular precursor rather than the exemption of the precursor itself. The EPA believes that this shift in focus is more consistent with the statutory language at CAA section 189(e), which also focuses on the exemption of sources from the control requirements for that precursor. As explained in Section III of this preamble, the EPA has defined a precursor demonstration specifically for exempting major sources of a particular precursor from regulation under the NNSR program. This demonstration involves a sensitivity-based analysis that evaluates the sensitivity of ambient $PM_{2.5}$ concentrations in a nonattainment area to increases of precursor emissions resulting from potential major source growth in the area. The EPA intends to issue a technical assistance document that provides additional information on conducting appropriate sensitivity-based analyses for this purpose. A more complete description of this and the other types of precursor demonstrations is contained in Section III of this preamble.

The EPA recommends that the state consult with the appropriate EPA Regional Office as early as possible to discuss appropriate analyses for the NNSR precursor demonstration. If the appropriate precursor demonstration is submitted to and approved by the Administrator, the state would not be required to regulate new major stationary sources and major modifications of the insignificant precursor under the state's approved NNSR program in a particular nonattainment area. Such exemption from the NNSR control requirements would include an exemption from all of the prerequisite conditions set forth in 40 CFR 51.165 for $PM_{2.5}$, including the requirements to implement LAER and to obtain emissions offsets for the precursor.

iii. Comments and Responses

Comments: Some commenters supported revising the definition of "regulated NSR pollutant" consistent with the *NRDC* decision and subpart 4 to establish SO_2, NO_X, VOC and ammonia as regulated $PM_{2.5}$ precursors, unless a state demonstrates that major stationary sources of a particular precursor do not contribute significantly to $PM_{2.5}$ levels that exceed the standard in the nonattainment area.

On the other hand, several commenters urged the EPA not to begin regulating VOC and ammonia as $PM_{2.5}$ precursors under the NNSR program at this time. Some of the commenters cited ongoing technical challenges related to evaluating the contribution of $PM_{2.5}$ precursor gases to ambient $PM_{2.5}$

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[214] The EPA explained earlier in this preamble that the court's 2013 decision in *NRDC* v. *EPA* reasoned that the EPA's approach to precursors in the 2007 and 2008 $PM_{2.5}$ regulations had the effect of reversing the presumption embodied with subpart 4 at CAA section 189(e) that a state should regulate major sources of all PM precursors unless the state has made a specific showing why regulation of sources of a particular precursor is not necessary.

concentrations, while some commenters stated that the EPA should provide an up-front rebuttable presumption that a state is not required to regulate VOC and ammonia as $PM_{2.5}$ precursors under NNSR. A commenter stated that requiring NNSR to apply to sources of these precursors that would have an insignificant impact on the nonattainment issue is a waste of resources and will unnecessarily lead to burdensome over-regulation for affected sources.

Response: We do not agree with the commenters who oppose the EPA's proposal to require regulation of all four technical and scientific precursors in $PM_{2.5}$ nonattainment areas. Specifically, we do not agree that a delay in regulating VOC and ammonia under a state's NNSR permitting program is reasonable or permissible. Similarly, the EPA does not agree that it has the authority to provide a rebuttable presumption to exempt VOC and ammonia from NNSR permitting requirements. CAA section 189(e) explicitly requires the regulation of major sources of $PM_{2.5}$ precursors unless the state demonstrates to the EPA's satisfaction that such regulation is unnecessary. Thus, CAA section 189(e) does not allow the EPA to unilaterally exempt an identified scientific and technical $PM_{2.5}$ precursor from regulation, nor does it permit the EPA to establish a rebuttable presumption exempting any $PM_{2.5}$ precursor from regulation. The EPA's use of a rebuttable presumption exempting certain precursors from regulation in its prior $PM_{2.5}$ implementation rules was directly at issue in *NRDC* v. *EPA,* wherein the court made it clear that it would be inappropriate for the EPA to establish such presumptions pursuant to the requirements of subpart 4.[215]

In some $PM_{2.5}$ nonattainment areas, the minimization (and offsetting) of new precursor emissions from major source growth in the area could be an important component of a state's attainment plan for the $PM_{2.5}$ NAAQS. Where it is not, CAA section 189(e) provides states with the opportunity to make an area-by-area demonstration that would enable the state to exempt sources of any $PM_{2.5}$ precursor from regulation if it is shown that sources of the precursor does not contribute significantly to the PM levels that exceed the standard in a particular nonattainment area. Accordingly, consistent with CAA section 189(e), this final rule provides guidance to assist states in preparing a NNSR precursor demonstration, as described in Section III of this preamble, by which sources of VOC, ammonia or any other $PM_{2.5}$ precursor may be exempted from the NNSR requirements for $PM_{2.5}$ if the state shows that increased source emissions of the relevant precursor would not contribute significantly to $PM_{2.5}$ concentrations in a $PM_{2.5}$ nonattainment area.

Moreover, as described in Section VIII.B.2 of this preamble, the EPA is not commencing with the regulation of VOC and ammonia (hence not requiring NNSR review of any new major stationary sources and major modifications of such precursors) for those states relying on Appendix S to issue NNSR permits during the interim SIP development period.[216] This provides states with an opportunity to evaluate the contribution of VOC and ammonia emissions from potential major source growth to ambient $PM_{2.5}$ concentrations and determine whether an exemption of new and modified sources of either of these precursors from the NNSR permitting requirements is justified before such sources will be subject to regulation.

b. Definition of "major stationary source" in Moderate and Serious $PM_{2.5}$ Nonattainment Areas—Direct $PM_{2.5}$ Emissions and $PM_{2.5}$ Precursors

i. Summary of Proposal

Subpart 4, as described earlier in this document, contains provisions for the classifications of PM_{10} nonattainment areas as either Moderate or Serious areas. However, the NNSR regulations for $PM_{2.5}$ set forth in the 2008 $PM_{2.5}$ NSR Rule were developed pursuant to subpart 1, which does not provide for the classification of designated nonattainment areas as Moderate and Serious areas. Accordingly, in the proposal for this final rule, the EPA proposed to amend its definition of "major stationary source" in the 40 CFR 51.165 NNSR regulations for $PM_{2.5}$ to address subpart 4 requirements concerning the regulation of direct $PM_{2.5}$ and $PM_{2.5}$ precursors in both Moderate and Serious nonattainment areas for $PM_{2.5}$. First, the EPA proposed to revise the definition of "major stationary source" by qualifying the term "regulated NSR pollutant" with the new phrase "(as defined in paragraph (a)(1)(xxxvii) of this section)." The new phrase explicitly cross-references the definition of "regulated NSR pollutant," which also defines each of the $PM_{2.5}$ precursors. Hence, sources of both direct $PM_{2.5}$ emissions and emissions of each $PM_{2.5}$ precursor would clearly be included in the definition of a "major stationary source."

Second, the EPA proposed to amend the definition of "major stationary source" consistent with section 189(b)(3) of the CAA to establish a lower major source threshold for new major stationary sources and major modifications locating in $PM_{2.5}$ nonattainment areas classified as Serious. CAA section 302(j) generally defines a "major stationary source" as a source that emits or has the potential to emit 100 tpy or more of any air pollutant. The provision explicitly states that this definition applies for purposes of the CAA except as otherwise expressly provided in the statute. Thus, for sources locating in $PM_{2.5}$ nonattainment areas classified as Moderate, where no CAA provision provides otherwise, the applicable major source threshold for direct $PM_{2.5}$ emissions and for each $PM_{2.5}$ precursor is 100 tpy. Subpart 4, meanwhile, establishes a major source threshold for PM_{10} nonattainment areas classified as Serious at 70 tpy in CAA section 189(b)(3). Therefore, the EPA proposed to set the major source threshold for direct $PM_{2.5}$ emissions and for each $PM_{2.5}$ precursor at 70 tpy of direct $PM_{2.5}$ emissions and each individual precursor. The alternative proposed for consideration was to promulgate a $PM_{2.5}$ major source threshold lower than 70 tpy of direct $PM_{2.5}$ emissions, recognizing that $PM_{2.5}$ is a subset of PM_{10}. The EPA sought comment on possible ways in which a $PM_{2.5}$ emissions rate different from the statutory 70 tpy rate for PM_{10} emissions could be established, taking into account variations in the $PM_{10}/PM_{2.5}$ ratio for different source categories and activities. Nevertheless, the agency indicated that the proposed option (*i.e.,* a major source threshold of 70 tpy of direct $PM_{2.5}$ emissions for stationary sources proposing to construct or modify in $PM_{2.5}$ nonattainment areas classified as Serious) represented the preferred approach.

In its effort to ensure that major sources of $PM_{2.5}$ precursors locating in Serious areas are regulated in the same manner as major sources of direct $PM_{2.5}$ emissions locating in Serious areas, the EPA proposed major source thresholds for $PM_{2.5}$ precursors would be consistent with the threshold already defined for direct $PM_{2.5}$ emissions in $PM_{2.5}$ nonattainment areas reclassified as Serious. Consistent with the EPA's preferred approach for direct $PM_{2.5}$ emissions, the EPA proposed to define "major" for each $PM_{2.5}$ precursor as 70 tpy. However, the EPA also solicited comments on the appropriateness of setting the precursor major source thresholds at a different rate, particularly if, as alternatively proposed, the agency defined "major stationary source" for sources of direct $PM_{2.5}$ emissions in Serious $PM_{2.5}$ nonattainment areas at a rate lower than 70 tpy of $PM_{2.5}$ emissions. For example, if the agency had set the major source threshold at 60 tpy of direct $PM_{2.5}$ emissions in Serious $PM_{2.5}$ nonattainment areas, the agency would have also considered setting the major source threshold for each $PM_{2.5}$ precursor at 60 tpy of that particular precursor.

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[215] *See NRDC* v. *EPA*, 706 F.3d at 437, n.7 & n.10.

[216] States should use Appendix S to issue NNSR permits to new major stationary sources and major modifications with respect to a particular nonattainment pollutant if the state's implementation plan lacks a NNSR program for that pollutant. Where a state's existing NNSR program for a particular pollutant lacks certain provisions for which revision in required, the existing program—not Appendix S—is the applicable permit program for issuing NNSR permits until the necessary revisions are approved by the EPA.

Regardless of whether the major source threshold for direct $PM_{2.5}$ emissions was set at 70 tpy or some lower rate, the EPA indicated in the proposal that it believed a reasonable technical argument could be made that the threshold set for direct $PM_{2.5}$ emissions would be too low to be regarded as "major" for each precursor when considering the effects that any precursor sources could have on ambient $PM_{2.5}$ concentrations. In support of higher emissions rates for defining "major" for $PM_{2.5}$ precursors, the EPA cited a previous analysis that it had undertaken to examine the relationship between emissions of SO_2 and NO_X and the formation of secondary $PM_{2.5}$ in the ambient air.[217] However, the agency also identified potential legal impediments to setting a major source threshold for precursors at a rate higher than those statutorily prescribed for direct emissions of a pollutant. Accordingly, the agency solicited comments on the general appropriateness of setting higher major source thresholds for one or more $PM_{2.5}$ precursors in $PM_{2.5}$ nonattainment areas, and asked commenters to include legal and technical considerations that should be made part of the EPA's future analysis of NNSR requirements with respect to $PM_{2.5}$ precursors.

ii. Final Rule

In this final rule, the EPA has followed its preferred approach and has made the changes necessary to ensure that "major" is defined for direct $PM_{2.5}$ emissions as well as all $PM_{2.5}$ precursors in Moderate and Serious $PM_{2.5}$ nonattainment areas. For Moderate areas, the major source threshold of 100 tpy applies individually to direct $PM_{2.5}$ emissions and to each $PM_{2.5}$ precursor; in Serious areas, the major source thresholds for direct $PM_{2.5}$ emissions and emissions of each $PM_{2.5}$ precursor are individually defined as 70 tpy. As explained in Section VIII.B.1.d of this preamble, the determination of whether sources of direct $PM_{2.5}$ emissions or each $PM_{2.5}$ precursor are "major" is to be made separately for each pollutant. That is, emissions rates for individual precursors should not be added together to determine a source's major source status with regard to $PM_{2.5}$. *See* 40 CFR 51.165(a)(2)(i).

iii. Comments and Responses

Comment: Most commenters generally supported the preferred approach of setting a major source threshold at 70 tpy of direct $PM_{2.5}$ emissions in Serious areas, agreeing with the EPA that establishing a $PM_{2.5}$ equivalency to PM_{10} emissions would be problematic. Some commenters specifically opposed any effort to set a threshold for $PM_{2.5}$ that is lower than the threshold for PM_{10}. A commenter stated that, if $PM_{2.5}$ is legally subject to subpart 4 because it is a subset of PM_{10}, and Congress meant to subject all sources of PM_{10} emissions to subpart 4, then Congress meant to have the major source threshold for PM_{10} apply to $PM_{2.5}$ as well. No commenter advocated that the EPA set a major source threshold lower than 70 tpy for direct $PM_{2.5}$ emissions.

Response: The EPA agrees with the commenters that it is reasonable to set the major source threshold at 70 tpy of direct $PM_{2.5}$ emissions for sources locating in $PM_{2.5}$ nonattainment areas classified as Serious. While CAA section 189(b)(3) does not explicitly define a "major source" and "major stationary source" as 70 tpy of $PM_{2.5}$ for $PM_{2.5}$ nonattainment areas reclassified as Serious (because it refers to PM_{10}), the most straightforward and consistent application of the statutory provision is to establish the same numerical threshold for sources of $PM_{2.5}$ in Serious $PM_{2.5}$ nonattainment areas as the threshold for sources of PM_{10} emissions in Serious PM_{10} nonattainment areas. Sources locating in Moderate nonattainment areas are already subject to the same numerical major source threshold (100 tpy) under CAA section 302(j) for direct emissions of both PM_{10} and $PM_{2.5}$, so the EPA believes that it is also reasonable to establish the threshold for $PM_{2.5}$ in Serious areas at the same numerical rate as the threshold that applies to PM_{10} in Serious areas.

We also agree that it would be difficult to establish a lower uniform major source threshold for $PM_{2.5}$ that would represent a rate that is equivalent to 70 tpy of PM_{10} emissions at all sources subject to NNSR permitting requirements. With regard to the commenter who stated that "Congress meant to have the major source threshold for PM_{10} apply to $PM_{2.5}$ as well," it is not clear whether the commenter advocates that proposed sources of $PM_{2.5}$ be subjected to NNSR permitting using a major source threshold of 70 tpy of PM_{10} emissions or a major source threshold of 70 tpy of $PM_{2.5}$ emissions for sources of $PM_{2.5}$ locating in $PM_{2.5}$ nonattainment areas. The former is not the EPA's interpretation of the CAA. While $PM_{2.5}$ is a subset of PM_{10}, to assume that a source emitting major amounts of PM_{10} will also emit a substantial amount of $PM_{2.5}$ is not always reasonable. The relative amounts of PM_{10} and $PM_{2.5}$ emitted by various source categories is known to vary significantly and we do not believe that it would be reasonable to subject sources to major source review for $PM_{2.5}$ on the basis of the level of PM_{10} emissions as this could mean that sources are subject to NNSR based on different levels of $PM_{2.5}$ emissions on an area-by-area basis. We do not believe that Congress intended such a lack of uniformity in the application of the major source threshold to sources of direct $PM_{2.5}$. Moreover, even if it were permissible to interpret CAA section 189(b)(3) in this manner, we have determined that the most reasonable and straightforward approach is to establish a separate major source threshold for direct emissions of $PM_{2.5}$ at 70 tpy for sources locating in $PM_{2.5}$ nonattainment areas classified as Serious.

Comment: With regard to the definition of "major stationary source" for $PM_{2.5}$ precursors in Moderate and Serious areas, several commenters supported using the same major source threshold value for direct $PM_{2.5}$ emissions and $PM_{2.5}$ precursors. One of these commenters expressly opposed any alternative approach that would set a different threshold for $PM_{2.5}$ precursors than for direct $PM_{2.5}$ emissions because the commenter asserted that it would be impossible to set a uniform national ratio reflecting the effect of the various precursors on ambient $PM_{2.5}$ concentrations relative to direct $PM_{2.5}$ emissions.

On the other hand, some commenters wanted the EPA to include a provision in the NNSR regulations allowing states to make a case-by-case demonstration to use higher major source thresholds for $PM_{2.5}$ precursors for permit reviews. These commenters expressed concern that the 100 tpy major source threshold for Moderate areas, and the 70 tpy threshold for Serious, are both too low for the $PM_{2.5}$ precursors and do not realistically reflect the effect that each precursor has on ambient $PM_{2.5}$ concentrations. These commenters suggested the EPA should conduct further analyses to determine what higher quantity of emissions of each regulated precursor would be equivalent to 100 tpy (for Moderate areas) and 70 tpy (for Serious areas) of direct $PM_{2.5}$ emissions in terms of contribution to $PM_{2.5}$ concentrations in ambient air. These commenters recommended that the EPA use the information gained from the recommended analyses to determine appropriate thresholds and make its proposed thresholds available for public comment.

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[217] *See* 80 FR 15433. The technical assessment, with details on data and modeling inputs, was fully described in a technical memo titled "Details on Technical Assessment to Develop Interpollutant Trading Ratios for $PM_{2.5}$ Offsets," which was placed in the docket to the 2008 $PM_{2.5}$ NSR Rule. *See also* 73 FR 28321 (May 16, 2008), at page 28339.

Response: In setting the major source threshold for each $PM_{2.5}$ precursor at 100 tpy for Moderate areas, the EPA is following the precedent established in the 2008 $PM_{2.5}$ NSR Rule in which the agency set the same 100 tpy major source threshold for direct $PM_{2.5}$ emissions and each of the regulated precursors (at that time SO_2 and NO_X).[218] Setting the same 100 tpy major source thresholds for sources of $PM_{2.5}$ emissions and regulated $PM_{2.5}$ precursor emissions is also consistent with the way in which we have historically interpreted the requirements of CAA section 189(e) as they applied to emissions of PM_{10} and PM_{10} precursors.[219]

Moreover, section 302(j) of the CAA contains a definition of "major emitting facility" and "major stationary source" that applies to, among other things, programs implemented under subpart 1 such as the general NNSR program requirements in CAA section 173.[220] This definition also applies to programs implemented under subpart 4 to the extent that they regulate $PM_{2.5}$ nonattainment areas classified as Moderate, as subpart 4 does not establish a different definition of major sources for such areas. That definition defines a source as "major" whenever a facility or source "emits, or has the potential to emit, one hundred tons per year or more of *any air pollutant.*"[221] This provision does not clearly provide the EPA with the authority to set a major source threshold higher than 100 tpy for a pollutant merely because it is a precursor for another pollutant. Rather, CAA section 302(g) clearly defines the term "air pollutant" to "include any precursors to the formation of any air pollutant."

With regard to the setting of the major source thresholds for PM_{10} precursors in Serious areas, a House of Representatives Report accompanying the 1990 amendments to the CAA described the effects of adding CAA section 189(b)(3), defining "major" sources locating in PM nonattainment areas classified as Serious as those sources that emit or have the potential to emit 70 tpy of PM_{10}. The report specifically notes that "new or modified sources emitting 70 tons or more per year of VOC [a $PM_{2.5}$ precursor] will be subject to new source review requirements."[222] Thus, Congress contemplated that the same major source threshold would apply to sources of direct PM_{10} emissions and PM_{10} precursors in Serious PM_{10} nonattainment areas. The same approach logically applies when applying the provision to sources locating in areas designated as Serious $PM_{2.5}$ nonattainment areas.

Since the EPA may not have the legal authority to establish major source thresholds for $PM_{2.5}$ precursors at levels higher than the statutory threshold applied to sources of direct $PM_{2.5}$ emissions, it would be inappropriate to allow states discretion for setting major source thresholds for $PM_{2.5}$ precursors that exceed the statutory thresholds. Moreover, while we acknowledge that $PM_{2.5}$ precursors will not likely form ambient $PM_{2.5}$ in the nonattainment area on a ton-per-ton basis, there is not currently sufficient technical basis that would enable the agency to propose uniform higher major source thresholds for any of the four $PM_{2.5}$ precursors. As stated in the proposal, the EPA intends to continue its analysis of the relationship between each precursor and ambient $PM_{2.5}$ concentrations.

Comment: Some commenters questioned the EPA's interpretation of the 2006 court decision in *South Coast Air Quality Mgmt. Dist.* v. *EPA*[223] as precluding higher major source thresholds because the court determined that NSR provisions, including major source thresholds, were control requirements subject to anti-backsliding provisions of the statute. The commenter argued that the South Coast decision did not address setting a major source threshold for a precursor pollutant that is as stringent as, or more stringent than, the major source threshold for the pollutant when the pollutant is directly emitted. The commenter stated the statutory provision on which the court in *South Coast* relied [CAA section 172(e)] is applicable on its face only when the EPA relaxes the NAAQS, which the commenter claimed is not relevant to the current situation here, where the EPA has promulgated progressively more stringent NAAQS for PM.

Response: CAA section 189(e) requires the control requirements that are applicable to major stationary sources of $PM_{2.5}$ to also apply to major stationary sources of $PM_{2.5}$ precursors. The court in *South Coast* held that the term "controls" under section 172(e) of the CAA includes NSR requirements, and in particular includes major source thresholds specified by the statute.[224] The commenter did not explain why the term "control" in CAA section 189(e) of the statute should be interpreted differently than the term "control" in other parts of the statute. Section 172(e) of the CAA is a provision in subpart 1 of part D of the statute concerning anti-backsliding requirements in designated nonattainment areas. It is reasonable for the EPA to conclude that the term "control" in one part of the statute pertaining to nonattainment area requirements should be interpreted consistent with the use of that term in other provisions of part D pertaining to nonattainment area requirements, particularly where both provisions apply to designated $PM_{2.5}$ nonattainment areas. Thus, consistent with the holding of *South Coast* regarding the definition of "controls," the EPA interprets the use of the term "control requirements" in CAA section 189(e) to require the same major source threshold be applied to $PM_{2.5}$ precursors as applies to direct $PM_{2.5}$ emissions.

The commenter also did not explain, and it is not clear, how a relaxation versus a strengthening of the NAAQS would bear on whether the EPA has authority to set different control requirements (*e.g.*, major source thresholds) for sources of direct emissions of a pollutant and sources of precursors of that pollutant. The EPA notes that Congress, in adding additional particulate matter requirements in subpart 4 of the CAA, decided that more stringent requirements were required to address air quality in particulate matter nonattainment areas. Hence, it would be inconsistent with that intention for Congress to allow higher major source thresholds to apply to sources of precursors than apply to direct $PM_{2.5}$ emissions.

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[218] *Ibid.*

[219] *See* 57 FR 13498 (April 16, 1992), at page 13538.

[220] *Ibid.* (*emphasis added*).

[221] 42 U.S.C. 7602(j).

[222] H.R. Rep. 101–490.

[223] *South Coast Air Quality Mgmt. Dist.* v. *EPA,* 472 F.3d 882, 900–902 (D.C. Cir. 2006) (*South Coast* decision).

[224] *See South Coast* decision (holding that "controls" in CAA section 172(e) anti-backsliding provision include NSR requirements such as LAER, offset ratios, and major source thresholds).

The EPA therefore believes that at this time the most reasonable approach for defining the major source threshold for $PM_{2.5}$ precursors in both Moderate and Serious areas is to use the same threshold that is being defined for direct $PM_{2.5}$ emissions. As explained earlier, the EPA currently has studies underway to better understand the effects of emissions of each precursor on the secondary formation of ambient $PM_{2.5}$ concentrations. However, even if such studies support the commenters' recommendation for higher precursor thresholds, the EPA must consider the potential legal restrictions on setting thresholds for precursors above the statutory requirements for direct emissions of an air pollutant.

c. Significant Emissions Rates (SERs) for $PM_{2.5}$ Precursors

i. Summary of Proposal

As noted earlier, stationary sources locating in nonattainment areas are subject to the NNSR permitting requirements to the extent construction at the source qualifies as a major modification with respect to a pollutant for which the area is designated nonattainment. A major modification of a stationary source is defined in the NNSR regulations at 40 CFR 51.165(a)(1)(v)(A) as "any physical change in or change in the method of operation of a major stationary source" that would result in (1) a significant emissions increase of a regulated NSR pollutant, and (2) a significant net emissions increase of that pollutant. The term "significant" is separately defined at 40 CFR 51.165(a)(1)(x)(A) to mean a rate of emissions specified for each pollutant or precursor for that pollutant. This is known as a significant emissions rate (SER). In the 2008 $PM_{2.5}$ NSR Rule, the EPA defined "significant" for SO_2 and NO_X as $PM_{2.5}$ precursors with an emissions rate of 40 tpy for each precursor.[225] Also, in the preamble to the 2008 $PM_{2.5}$ NSR Rule, the EPA indicated that it would consider 40 tpy of VOC emissions to be "significant" in any state regulating VOC as a $PM_{2.5}$ precursor; however, that significant emissions rate was not codified in any of the NSR regulations because the regulations governing both NNSR and PSD permitting programs provided that VOC was generally presumed not to be a precursor to $PM_{2.5}$. Instead, the agency explained that any state making a demonstration that VOC should be treated as a $PM_{2.5}$ precursor in a particular nonattainment area "would be required to adopt the 40 tpy SER unless it demonstrated that a more stringent SER (lower rate) is more appropriate."[226]

The EPA did not include any changes to the existing SERs for SO_2 and NO_X as $PM_{2.5}$ precursors in the proposal. Nor did we propose a SER for ammonia, citing a lack of adequate technical support. However, the EPA proposed to codify a SER of 40 tpy for VOC in the NNSR permitting regulations. *See* 55 FR 15434.[227] The EPA further stated that, as a result, only the ammonia SER would remain to be defined by each state that needs to control major stationary sources of ammonia as part of its NNSR program for $PM_{2.5}$. While not proposing to revise the existing 40 tpy SER values for SO_2 and NO_X, the EPA indicated it believed that, when more data are available, such data might provide a reasonable basis for considering subsequent changes to the SER for each $PM_{2.5}$ precursor for purposes of implementing the $PM_{2.5}$ NAAQS. Moreover, the EPA indicated that a separate rulemaking might be used to propose a new SER for each $PM_{2.5}$ precursor. *See* 80 FR 15434.

ii. Final Rule

The EPA is finalizing its proposed approach with some changes to the final regulatory language. The final rule amends the definition of "significant" in the NNSR regulations at 40 CFR 51.165(a)(1)(x)(A) to add a SER for VOC. Thus, the revised definition contains individual SERs for direct $PM_{2.5}$ emissions (10 tpy), SO_2 emissions (40 tpy), NO_X emissions (40 tpy), and VOC emissions (40 tpy). The revised definition does not contain a SER for ammonia emissions. Instead, a new subparagraph has been added to the definition of "significant" to require that an implementation plan defines the term for ammonia in cases where sources of ammonia are not otherwise exempted from NNSR control requirements. *See* 40 CFR 51.165(a)(1)(x)(F). Such definition of "significant" for ammonia would need to be established by the state for a particular nonattainment area as part of its SIP submission for NNSR. The EPA's rationale for not establishing an ammonia SER in this action is provided in greater detail in the following section.

iii. Comments and Responses

Comment: Several commenters generally recommended that the EPA establish higher SERs for the $PM_{2.5}$ precursors. These commenters expressed the need for values that more accurately represented each precursor's relative effect on ambient $PM_{2.5}$ concentrations. One of these commenters stated that in the absence of such higher SERs in the NNSR regulations, the EPA should allow states to demonstrate the appropriateness of a higher SER for a particular precursor on either a statewide or area-by-area basis in a SIP submission, or through the NNSR program on a case-by-case basis.

Another of the commenters supporting higher significance thresholds for each precursor stated that the CAA's definitions of "major source" and "major emitting facility" trigger the statutory control requirements and its permit requirements for affected sources, but they do not define how much of a pollutant is regulated after the control or permit requirement is triggered by the CAA. The commenter stated that the EPA would appear to have ample authority to require that precursors be regulated based on different thresholds once a major source triggers a particular control or permit requirement, provided there is adequate technical basis for doing so.

Response: The EPA did not propose to reconsider or revise the SERs for SO_2 and NO_X; therefore, revisions to these rates are outside the scope of this action. Even if the EPA were to consider such a revision, it would provide little relief to new or modified sources subject to NSR. Because SO_2 and NO_2 are pollutants for which the EPA has established NAAQS and because NO_X and VOC are precursors for ozone, modifications with emissions increases above the current SERs for SO_2, NO_X or VOC would still be subject to some form of new source review (PSD if the area is attainment for the NAAQS pollutant or nonattainment NSR if the area is nonattainment) even if the SERs for these pollutants as $PM_{2.5}$ precursors were revised to a higher value.

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[225] *See* the **Federal Register** published on May 16, 2008 (73 FR 28321, 28333 and 28334); and existing 40 CFR 51.165(a)(1)(x)(A).

[226] *See* the **Federal Register** published on May 16, 2008 (73 FR 28321 and 28333).

[227] The EPA notes that the 2015 NPRM included some potentially conflicting statements concerning the development of a SER for VOC. First, the preamble indicated that the EPA intended to consider a separate rulemaking to consider proposing new SERs for SO_2 and NO_X, while also proposing individual significant emissions rates for VOC and ammonia. Later in the same preamble, the EPA indicated that it was proposing to add VOC as a precursor with a 40 tpy significant emissions rate, and included regulatory text to show that aspect of the proposal, *i.e.*, proposed 40 CFR 51.165(a)(1)(x)(A).

Moreover, we do not believe that the statute would permit the EPA or states to adopt a definition of "significant" for purposes of identifying modifications subject to NSR permitting with rates greater than the statutory and regulatory definitions of a major source in a nonattainment area, as defined in CAA section 302(j) for sources locating in $PM_{2.5}$ nonattainment areas classified as Moderate (100 tpy) and as defined in CAA section 189(b)(3) for sources locating in $PM_{2.5}$ nonattainment areas classified as Serious (70 tpy). Consequently, we do not believe that there would be substantial cost savings to many sources if we were to revise the SERs for these pollutants specifically as $PM_{2.5}$ precursors.

Comment: Some commenters directed specific attention to the definition of a SER for ammonia. These commenters urged the EPA to set a significance threshold for ammonia as soon as possible. These commenters stated that, without a SER, any significant emissions increase greater than zero tons per year would result in a major source review for NNSR.

Some commenters stated that, while the EPA indicates that a SER for ammonia may be developed in a subsequent rulemaking, if that rulemaking is not timely, the state would need to develop a SER for ammonia to reduce the burden on permit applicants and avoid permit issuance delays related to major source applicability determinations and permit development for ammonia and $PM_{2.5}$. Two of the commenters noted that ammonia is used in many industry and source types to control NO_X emissions through the implementation of selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR) control devices. These commenters stated that, without a SER for ammonia, it's very possible that many NNSR reviews will be initiated simply because of any ammonia increase at a major source. To address this problem, some commenters stated that, until the EPA completes its analysis for ammonia, states need the ability to conduct case-by-case reviews for NNSR permits by requiring applicants to submit a technical demonstration showing that emissions of a particular precursor do not significantly contribute to $PM_{2.5}$ levels that exceed the standard in an area, thus exempting the precursor from being controlled by that source.

Some commenters recommended that the EPA propose a SER for ammonia before finalizing the March 23, 2015, proposal and suggested the EPA should also provide definitive guidance for state and local agencies on how to conduct permitting of major sources of ammonia until a SER is established. Other commenters stated that, at the time the EPA proposes new significant emission rates for precursors, the EPA should also establish the significant emission rate for ammonia. Yet another commenter stated that any precursor analyses conducted by the EPA should be done in close coordination with designated nonattainment areas to reduce duplication of efforts and conflicting outcomes that could in turn lead to more costly impacts on sources and on agencies' limited resources. Finally, some commenters stated that the EPA should at least provide guidance for states to develop a SER for ammonia as a $PM_{2.5}$ precursor.

Response: The EPA did not propose a SER for ammonia and, therefore, this rule does not finalize a SER for ammonia. The EPA's initial plan, as explained in the proposal, was to establish a SER for ammonia in a separate rulemaking, which was also intended to establish significant impact levels (SILs) for Ozone and $PM_{2.5}$ in order to streamline the air quality impact analysis under the PSD permitting program. However, based on the imminent need for the SILs (especially for ozone) for PSD permitting, the agency has decided to issue guidance in lieu of a rulemaking for the PSD-based SILs. After due consideration, the EPA has also concluded that a separate rulemaking solely for the purpose of developing a SER for ammonia is not warranted. We anticipate that very few states will actually need to control source modifications of ammonia under their NNSR programs for $PM_{2.5}$ since (1) stationary sources of ammonia generally are not one of the primary causes of ambient $PM_{2.5}$ concentrations in most $PM_{2.5}$ nonattainment areas, and (2) according to information in the EPA's NEI database, most existing $PM_{2.5}$ nonattainment areas do not have an existing major stationary source of ammonia to which the ammonia SER would be applied to determine whether a proposed modification of such major source would be "major" for ammonia.

Unlike the EPA's PSD regulations, the definition of "significant" in the NNSR regulations at 40 CFR 51.165 does not include a provision stipulating that, for any pollutant that does not have a listed emissions rate, "any increase" must be considered significant.[228] Therefore, contrary to the concerns of some commenters, the absence of an ammonia SER in the EPA's NNSR regulations at 40 CFR 51.165 does not result in a default "any increase" interpretation of "significant" that must be contained in state NNSR programs. Accordingly, for the above reasons and due to the time, resources and process investment associated with a national rulemaking, the EPA believes that a national rulemaking to develop a SER for ammonia is neither warranted nor effective. As explained above, the EPA is finalizing a provision that requires states that must regulate modified major stationary sources of ammonia to develop and submit a definition of "significant," such as an appropriate SER, for ammonia to be included, subject to the EPA's approval in the state's SIP. *See* 40 CFR 51.165(a)(1)(x)(F). The EPA recommends that states consult with the appropriate EPA Regional Office to develop an ammonia SER as a means of defining "significant" for a particular nonattainment area. As a general rule, the EPA believes that the ammonia SER in a Moderate nonattainment area should be an emissions rate no greater than 100 tpy of ammonia. Any SER that exceeds 100 tpy could not be approved by the EPA because any higher emissions rate would exceed the major source threshold established in the CAA.[229] In the event that a nonattainment area is classified Serious for $PM_{2.5}$, the maximum acceptable ammonia SER would be a rate no greater than 70 tpy in accordance with the major source thresholds being finalized in this rule for major stationary sources of direct $PM_{2.5}$ emissions and $PM_{2.5}$ precursors locating in Serious $PM_{2.5}$ nonattainment areas. States that regulate ammonia as a $PM_{2.5}$ precursor should also include a technical justification for the ammonia SER for a nonattainment area that the state includes as a part of its NNSR SIP rules submission for EPA approval.

d. NNSR Applicability Determinations

i. Summary of Proposal

In setting SERs and major source thresholds for emissions of direct $PM_{2.5}$ and $PM_{2.5}$ precursors, the EPA explained in the preamble to the proposal that it intended for direct $PM_{2.5}$ emissions and each individual $PM_{2.5}$ precursor to be treated separately for determining the applicability of the

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[228] Compare the definitions of "significant" under the PSD regulations at 40 CFR 51.166(b)(23) and 52.21(b)(23), especially subparagraph (ii), with the NNSR definition at 40 CFR 51.165(a)(x).

[229] The NNSR definition of "major stationary source" includes a provision at 40 CFR 51.165(a)(iv)(A)(*3*) that requires any physical change at an existing source that would not otherwise qualify as a major stationary source if the change would constitute a major stationary source by itself.

NNSR requirements to a proposed new source or modification. The EPA stated that such individual treatment of direct emissions and precursors was consistent with its policy as explained in previous rulemakings. In particular, the preamble to the 2008 $PM_{2.5}$ NSR Rule explained that this applicability interpretation applied to both PSD and NNSR. However, at that time, we did not codify this interpretation in any of the NSR regulations. *See* 73 FR 28231, May 16, 2008, at page 28331. In the proposal, the EPA proposed language in the NNSR regulations at 40 CFR 51.165(a)(2)(i) to explicitly codify the policy.

ii. Final Action

The EPA is revising the NNSR regulations at 40 CFR 51.165(a)(2)(i) to codify the EPA's policy that direct emissions of a pollutant and emissions of any applicable precursor are to be considered independently for purposes of determining the applicability of the NNSR requirements for $PM_{2.5}$ sources. For example, in order for a source to be subject to the NNSR requirements for $PM_{2.5}$ with respect to NO_X as a $PM_{2.5}$ precursor, the source must be either (1) a new stationary source that emits or has the potential to emit major amounts of NO_X (new major source of NO_X); or (2) an existing major source of NO_X that proposes to increase its emissions of NO_X by a significant amount and also results in a significant net emissions increase.

iii. Comments and Responses

Comment: A commenter requested that the EPA clarify in its NSR rules how to evaluate major source applicability for NNSR and PSD with respect to $PM_{2.5}$ precursors. The commenter agreed that major source applicability determinations should be based on individual precursor pollutant emissions, and that different pollutants, including individual precursors, should not be summed to determine applicability for NNSR major stationary source or major modification. The commenter also raised various questions pertaining to how the precursors would trigger major source applicability for other pollutants.

Response: This final rule contains the following statement within the NNSR regulations at 40 CFR 51.165(a)(2)(i), "Different pollutants, including individual precursors, are not summed to determine applicability of a major stationary source or major modification." The commenter's specific precursor-related applicability questions and the EPA's responses are included in the Response to Comment document contained in the Docket for this rulemaking.

e. NNSR Plan Due Dates

i. Summary of Proposal

In the proposal, the EPA explained that CAA section 189(a)(2)(B) requires states to submit to the EPA an attainment plan satisfying the applicable requirements within 18 months of an area being designated nonattainment pursuant to a new or revised $PM_{2.5}$ NAAQS. *See* 80 FR 15437. Section 189(a)(1)(A) of the CAA specifically requires that such plans include the NNSR permitting requirements under CAA section 173. Thus, the EPA indicated that states would be required to submit the applicable NNSR program requirements for $PM_{2.5}$ within 18 months from the effective date of area designations for the 2012 $PM_{2.5}$ NAAQS. *See* 80 FR 15437.

The EPA also noted that the CAA does not specify a deadline for the states' submittal of NNSR program revisions in the event that a Moderate $PM_{2.5}$ nonattainment area is subsequently reclassified as Serious like the CAA establishes a deadline for other plan provisions. Accordingly, the EPA used its gap-filling authority under CAA section 301(a) to propose a similar 18-month deadline, from the effective date of a final reclassification of the area as Serious, for states to submit a plan prescribing the more stringent NNSR requirements required by the statute for Serious areas. However, in light of the fact that such revisions would generally be straightforward to make, and to assure that new major sources and major modifications in the area would be subject to the more stringent NNSR requirements contained in subpart 4 for Serious areas, the EPA sought comments on an alternative 12-month timeframe for submittal of the NNSR plan revisions for Serious areas.

ii. Final Rule

The EPA is finalizing an 18-month deadline for states to submit plan revisions for NNSR requirements for $PM_{2.5}$ after an area is initially designated to nonattainment (Moderate area) or reclassified to Serious. *See* 40 CFR 51.1003(a) and (b), respectively. As explained elsewhere in this Section VIII of the preamble, plan revisions applicable to areas reclassified as Serious must address the more stringent major source thresholds for direct $PM_{2.5}$ emissions and each applicable $PM_{2.5}$ precursor for Serious areas. With regard to the provisions for precursors, the EPA emphasizes that if the state seeks to continue to exempt a precursor from NNSR control requirements, the state will need to reevaluate any previous finding that resulted in the exclusion of a precursor from the NNSR control requirements on the grounds that the precursor did not significantly contribute to $PM_{2.5}$ levels that exceed the NAAQS. The requirement at 40 CFR 51.1006(b) calling for a new NNSR precursor demonstration means that, even if the existing NNSR program already includes the necessary provisions for a Serious area classification under a prior approval, a plan revision pertaining to NNSR may still be required to add requirements for a precursor that had previously been exempted, if a new NNSR precursor demonstration does not support continued exemption of that precursor.

The requirements for submitting plan revisions at 40 CFR 51.1003 also provide for situations where an area classified as Serious is subject to CAA section 189(d) for failing to attain the $PM_{2.5}$ NAAQS by the applicable Serious area attainment date. *See* 40 CFR 51.1003(c). The list at § 51.1003(c), which contains attainment plan requirements that must be submitted as plan revisions, does not include the NNSR plan requirements contained at § 51.165. This omission results from the fact that Serious area requirements should have already been included in the NNSR program when the area was originally reclassified as Serious. Hence, there is no explicit requirement to revise the NNSR plan requirements in such cases. However, in light of the fact that states have the opportunity to submit a new NNSR precursor demonstration for each required plan revision (40 CFR 51.1006(b)), there may indeed be a need to revise the NNSR requirements in the event that a previous exemption can no longer be supported by the new NNSR precursor demonstration. Therefore, to the extent that a state's plan previously exempted sources of a precursor from NNSR regulation, a plan revision for a Serious area that fails to attain the $PM_{2.5}$ NAAQS by the applicable Serious area attainment date will need to include a re-evaluated NNSR precursor demonstration if the state wishes to continue to exempt sources of that precursor. Such a plan revision is required to be submitted no later than 12 months from the applicable Serious area attainment date that was previously missed, in accordance with 40 CFR 51.1003(c)(2). The NNSR regulations have also been amended at 40 CFR 51.165(a)(13) to address the need to re-evaluate such a demonstration to exempt a particular precursor from the NNSR requirements for $PM_{2.5}$.

iii. Comments and Responses

Comment: Some commenters supported allowing states at least 18 months to make the required SIP submission for NNSR. A commenter who supported the longer submission period stated that, although it is easy to write the rule language to make this change, it is likely to be quite difficult to perform the environmental and socio-economic analyses required by state law if the lowering of the threshold for a Serious area does indeed have a significant effect on the building of new or the repowering of existing power plants.

Response: Although the types of revisions needed to an existing NNSR program to address the new subpart 4 requirements for $PM_{2.5}$ are relatively straightforward, the EPA acknowledges that such changes nevertheless often involve related analyses as well as state legislative review and approval. In addition, some states will be submitting NNSR regulations for $PM_{2.5}$ for the first time and, as such, could need more than 12 months to obtain the necessary legislative review and approval. Accordingly, the EPA believes that the most reasonable approach for establishing the plan due date for revised plans for $PM_{2.5}$ is to establish an 18-month deadline for submission of plans both upon initial designation to nonattainment for a particular $PM_{2.5}$ standard and upon any subsequent reclassification to Serious.

2. Offset Ruling at 40 CFR Part 51 Appendix S

In this final rule, as explained later, the EPA is making the following revisions for $PM_{2.5}$ in the Emission Offset Interpretive Ruling (40 CFR part 51, Appendix S): (a) Amending the definition of "regulated NSR pollutant" with regard to $PM_{2.5}$ precursors; (b) amending the definition of "major stationary source" with regard to major sources of direct $PM_{2.5}$ emissions and $PM_{2.5}$ precursors in Serious areas; and (c) amending the definition of "significant" with regard to identifying major modifications of sources of $PM_{2.5}$ precursors.

a. Appendix S Definition of "Regulated NSR Pollutant"—$PM_{2.5}$ Precursors

i. Summary of Proposal

The definition of "regulated NSR pollutant" contained in Appendix S at section II.A.31(ii)(*b*)(*2*) has, to date, only required regulation of SO_2 as a $PM_{2.5}$ precursor for states relying on Appendix S to issue permits to sources locating in $PM_{2.5}$ nonattainment areas. The EPA proposed to revise the definition in Appendix S of "regulated NSR pollutant" to also require regulation of NO_X as a $PM_{2.5}$ precursor.[230] The EPA noted that this proposed approach would ensure that states using the permitting requirements contained in Appendix S to issue permits to major new and modified sources in $PM_{2.5}$ nonattainment areas will regulate the same precursors that have been subject to regulation in states that have already adopted NNSR requirements for $PM_{2.5}$ based on the 2008 $PM_{2.5}$ NSR Rule.

The EPA also proposed an alternative approach based on similar logic that would initially require only SO_2 and NO_X to be regulated as $PM_{2.5}$ precursors, while later phasing in VOC and ammonia after states have prepared and the EPA has had sufficient time to evaluate any pending precursor demonstrations. *See* 80 FR 15436–37. Finally, the EPA also sought comments on an alternative to require the immediate regulation of all four scientific $PM_{2.5}$ precursors (SO_2, NO_X, VOC and ammonia) in Appendix S.

ii. Final Rule

The EPA is amending Appendix S in this final rule to provide for the immediate regulation of SO_2 and NO_X as regulated NSR pollutants (specifically as $PM_{2.5}$ precursors) and for the subsequent conditional phasing in of VOC and ammonia as regulated NSR pollutants ($PM_{2.5}$ precursors) on the date 24 months from the effective date of the nonattainment designation in each area. The EPA was persuaded by the comments received expressing concerns that states may delay NNSR SIP development to instead rely on a less-inclusive Appendix S for NNSR permitting if only SO_2 and NO_X were regulated.

The alternative proposal featuring the phase-in approach balances the opportunity for states to demonstrate in the short-term that certain precursors need not be regulated with the need to ensure that the appropriate precursors are controlled in a manner consistent with the CAA. NNSR is unique among the nonattainment area requirements in that sources seeking a construction permit must comply with NNSR requirements for a particular pollutant as soon as an area is designated nonattainment for that pollutant and not some months or years later, when the EPA formally approves a state plan and the sources comply with the remaining plan provisions. With respect to precursors in particular, this means that new and modified major sources of direct $PM_{2.5}$ or a regulated $PM_{2.5}$ precursor would be subject to NNSR regulation upon the effective date of the area designation to nonattainment. If the EPA required the immediate regulation of all four scientific $PM_{2.5}$ precursors in Appendix S, states issuing permits pursuant to those provisions during the interim SIP development period would need to require regulation of certain precursors that the state may later be able to demonstrate through a SIP submission do not significantly contribute to $PM_{2.5}$ levels that exceed the standard in a particular area. As state plans making such a NNSR precursor demonstration are not due until 18 months after the effective date of the area designation, and as the statute allows the EPA up to 18 months to act on such submissions, sources seeking permits to locate in such areas during this interim period might for several years be subject to more stringent controls than necessary to address $PM_{2.5}$ nonattainment in that area.

The EPA is also cognizant, however, that some states have relied on Appendix S to conduct NNSR permitting well beyond the statutory SIP development period. In such cases, it would be inequitable if states could indefinitely rely on Appendix S that requires little to no regulation of some of the scientific $PM_{2.5}$ precursors when other states are fulfilling their statutory duty to submit a SIP revision addressing all $PM_{2.5}$ precursors. In particular, states that have submitted NNSR SIPs addressing $PM_{2.5}$ requirements for the 1997 and 2006 standards have to date regulated SO_2 and NO_X as $PM_{2.5}$ precursors. These SIP provisions will continue to apply with respect to any areas designated nonattainment as to the 2012 standard in those states until the states submit SIP revisions to address the 2012 NAAQS, including provisions necessary to comply with the precursor requirements in CAA section 189(e). States either continuing to rely on Appendix S by virtue of a nonattainment area designation under a prior $PM_{2.5}$ standard or states newly relying on Appendix S by virtue of a nonattainment area designation under the 2012 standard have to date only been required to regulate SO_2 as a regulated NSR pollutant (specifically as a $PM_{2.5}$ precursor).

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[230] The EPA notes that in the preamble to the proposal, it was stated that the EPA proposed to add NO_X as a $PM_{2.5}$ precursor at section II.A.31.(iii)(*b*) of Appendix S. This was an incorrect reference, which should have read "section II.A.31.(ii)(*b*)." This final rule cites the correct section for the affected portion of the definition of "regulated NSR pollutant," where NO_X is being added as a $PM_{2.5}$ precursor.

In order to balance these competing interests and concerns, the EPA has determined in this final rule to revise Appendix S in order to require that any state relying on Appendix S initially regulate both SO_2 and NO_X as regulated NSR pollutants ($PM_{2.5}$ precursors) for NNSR permits, thereby aligning the requirements of Appendix S with the prevailing requirements of SIP-approved NNSR permitting provisions for $PM_{2.5}$ in other states. *See* Appendix S, section II.A.31.(ii)(*b*)(*2*). Further, the final rule provides that VOC and ammonia will be phased in as regulated NSR pollutants ($PM_{2.5}$ precursors) according to a prescribed schedule based on existing and future nonattainment area designations for $PM_{2.5}$, unless the EPA has determined, prior to the scheduled phase-in, that the state submitted a complete proposed NNSR program for $PM_{2.5}$ that includes a NNSR precursor demonstration. The EPA believes it is reasonable not to require regulation of sources of VOC and ammonia in Appendix S during the interim SIP development period because we expect that, in many cases, states will submit SIPs that include as part of their proposed NNSR rules for $PM_{2.5}$ a NNSR precursor demonstration indicating that they do not need to regulate new major stationary sources and major modifications of ammonia (and in some cases of VOC) under their NNSR programs in order to provide for attainment of the $PM_{2.5}$ NAAQS.

Under the phase-in schedules being finalized in Appendix S, permits issued by states under the requirements in Appendix S will not be required to address VOC and ammonia as regulated NSR pollutants ($PM_{2.5}$ precursors) until the state has had an opportunity to show that, as part of a proposed NNSR program for $PM_{2.5}$, sources of a particular precursor does not significantly contribute to $PM_{2.5}$ concentrations that exceed the standard in a given nonattainment area. If a state submits such a NNSR precursor demonstration as to either VOC or ammonia as part of a complete SIP submission that includes the state's proposed NNSR program for $PM_{2.5}$, the state would not be required to regulate the applicable precursor pursuant to the provisions of Appendix S, unless the EPA reviews that proposed NNSR program for $PM_{2.5}$ and the NNSR precursor demonstration and either determines that the SIP submission is incomplete or disapproves both the NNSR program and the NNSR precursor demonstration. Thus, the regulation of VOC and ammonia as regulated NSR pollutants ($PM_{2.5}$ precursors) pursuant to Appendix S will occur in three circumstances. First, in the absence of a plan submission that includes the appropriate NNSR precursor demonstration, VOC and ammonia will be phased in as regulated precursors pursuant to Appendix S 24 months after the effective date of area designations for $PM_{2.5}$. This will prevent states that fail to make a complete plan submission from continuing to rely on Appendix S to regulate only SO_2 and NO_X as $PM_{2.5}$ precursors indefinitely. Second, if the EPA determines that the portion of the SIP containing the NNSR precursor demonstration submitted by the state is incomplete within the time allowed under CAA section 110(k)(1)(B), all precursors must be regulated upon EPA's determination of incompleteness or by the prescribed phase-in date, whichever date is later. The EPA believes it is important to condition the phase-in of VOC and ammonia regulation on the completeness of the SIP submission in order to deter the submission of plans that do not meet certain minimum criteria simply to avoid the regulation of these additional precursors.[231] Finally, if the EPA disapproves both the proposed NNSR program for $PM_{2.5}$ and the accompanying NNSR precursor demonstration, the relevant precursors will be phased in to be regulated under Appendix S as of the effective date of the disapproval or by the prescribed phase-in date, whichever date is later.[232]

The EPA chose this 24-month period for phase-in of VOC and ammonia as $PM_{2.5}$ precursors in accordance with (1) the requirement under CAA section 189(a)(2)(B) of subpart 4 that plan revisions for $PM_{2.5}$ attainment plans be submitted to the EPA within 18 months of area designations, and (2) the requirement under CAA section 110(k)(1)(B) that the EPA determine no later than six months after the date by which a state is required to submit a SIP whether a state has made a submission that meets the minimum completeness criteria established per CAA section 110(k)(1)(A).[233] In order to provide an appropriate balance between the EPA's interests in providing states with the opportunity to develop precursor demonstrations prior to regulation of those precursors and in encouraging states to submit SIPs in a timely manner, the EPA believes it is reasonable to align the conditional phase-in of VOC and ammonia as regulated NSR pollutants ($PM_{2.5}$ precursors)with the statutory timeframe for states to make SIP submissions addressing precursor regulation for NNSR and for the EPA to evaluate whether a state has made a complete submission. Thus, if by this 24-month deadline, a state has not submitted a precursor demonstration that VOC and/or ammonia need not be regulated, which has been determined to be complete by the EPA or deemed complete by the operation of law by this 24-month deadline, Appendix S will require regulation of these precursors going forward.

The EPA has specifically included the 6-month period for EPA's completeness review because we believe it is important to discourage states from submitting SIPs that do not meet the minimum completeness criteria found in 40 CFR part 51, Appendix V. Conditioning the phase-in on a completeness review will not only encourage states to make timely SIP submissions addressing the NNSR requirements, but also ensure that those submissions contain the minimum information necessary to enable the Administrator to determine whether the SIP complies with the statute. If a state with a designated $PM_{2.5}$ nonattainment area that is currently relying on Appendix S makes a submission addressing NNSR program requirements, including a NNSR precursor demonstration, within 18 months of the designation (as required by CAA section 189(a)(2)(B)), either EPA must evaluate the submission for completeness within 6 months or the SIP will become complete by operation of law, pursuant to CAA section 110(k)(1)(B). The latest date that a timely-submitted implementation plan would be determined to be complete by the EPA or deemed complete by operation of law is 24 months from the effective date of the $PM_{2.5}$ nonattainment area designation. In other words, in the absence of EPA action to evaluate completeness, a state that submits a timely SIP addressing NNSR and including a NNSR precursor demonstration can be confident the submission will become complete by operation of law by the 24-month conditional phase-in date, and such states will not be required to regulate the precursor addressed by its demonstration (VOC or ammonia) in the $PM_{2.5}$ nonattainment area pursuant to Appendix S during the period of EPA's review of the SIP. States that submit untimely SIPs, after the 18-month SIP submission deadline, cannot rely on the SIP becoming complete by operation of law before the 24-month conditional phase-in date. If the EPA has not acted to evaluate the completeness of the state's untimely SIP by the 24-month conditional phase-in, control of VOC and ammonia are automatically phased in for the $PM_{2.5}$ nonattainment area under Appendix S, regardless of whether such SIP submission might later be determined complete, whether by EPA or by operation of law. Thus, if a state submits an untimely SIP addressing NNSR for a particular $PM_{2.5}$ nonattainment area, including an NNSR precursor demonstration, such state can only avoid the conditional phase-in of VOC and ammonia control pursuant to Appendix S if the EPA affirmatively determines the submission to be complete by 24 months from the date of the area designation. In such circumstances, states are encouraged to coordinate with the appropriate EPA Regional Office.

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[231] The minimum requirements for evaluating the completeness of such submissions can be found in 40 CFR part 51, Appendix V, Criteria for Determining the Completeness of Plan Submissions.

[232] If the EPA disapproves a state's NNSR precursor demonstration but the state's NNSR program is otherwise approvable, the EPA may partially disapprove the NNSR SIP provisions for failure to properly regulate sources of the relevant precursor and otherwise partially approve the program. Upon the partial approval of a state's NNSR program, Appendix S will no longer be the applicable set of requirements by which NNSR permits are to be issued by the state. Thus, the phase-in of the relevant precursor will only occur in the event that the EPA both disapproves the NNSR program for $PM_{2.5}$ and the state's NNSR precursor demonstration. The partial disapproval of a state's NNSR program with respect to the regulation of a precursor will obligate the EPA to promulgate a federal implementation plan (FIP) pursuant to CAA section 110(c)(1) to address the regulation of that precursor within 2 years of the disapproval unless the Administrator approves a state plan or plan revision correcting the deficiency. The disapproval will also trigger the application of sanctions pursuant to CAA section 179(a) unless the state corrects the deficiency within 18 months.

[233] CAA section 110(k)(1)(B) specifically requires the Administrator to evaluate the completeness of a SIP submission within 60 days of receipt, but no later than 6 months after the date by which the SIPs were due. If the Administrator does not affirmatively evaluate the completeness of the SIP within that time period, the statute provides that the SIP shall be deemed complete by operation of law 6 months after receipt.

The timing of the phase-in for a particular area will depend upon the effective date of the designation to nonattainment for $PM_{2.5}$. Because this rule establishes requirements that apply in both present and future nonattainment areas, the regulations address the timing of the precursor phase-in both for areas already designated nonattainment for $PM_{2.5}$ and for areas that may be so designated in the future.

For any existing nonattainment area that was first designated nonattainment for $PM_{2.5}$ effective on or before April 15, 2015 (which includes areas designated for the 1997, 2006 and 2012 $PM_{2.5}$ NAAQS), VOC and ammonia will be required to be controlled as $PM_{2.5}$ precursors for any NNSR permit issued on or after April 15, 2017 (24 months from the date of area designations for the 2012 $PM_{2.5}$ NAAQS), unless the state has submitted before the phase-in date a complete SIP revision that includes the state's proposed NNSR program for $PM_{2.5}$ and a NNSR precursor demonstration showing that VOC, ammonia, or both do not contribute significantly to $PM_{2.5}$ concentrations that exceed the standard in a given $PM_{2.5}$ nonattainment area, consistent with the requirements of 51.1003, in which case the control of the precursors addressed by the submitted demonstration will not be required to be controlled at the 24-month mark. *See* Appendix S, section II.A.31.(ii)(*b*)(*3*). In order to satisfy this condition, such demonstration must be submitted in the form of a SIP revision and must either be determined to be complete by the EPA or deemed to be complete by operation of law pursuant to the provisions in CAA section 110(k)(1)(B).

Although areas were designated nonattainment for the 1997, 2006, and 2012 standards at different times, the EPA believes it is reasonable to apply the same phase-in date for all areas designated nonattainment as of the date of the designations for the 2012 standard. Area designations for the 2012 $PM_{2.5}$ standards were finalized on April 15, 2015, and plans addressing the nonattainment area requirements as to that standard are due October 15, 2016. Therefore, states evaluating their NNSR programs in light of the subpart 4 requirements with respect to the 2012 standard will have some, if limited, opportunity to consider the requirements of this rule and EPA's technical guidance before submitting a plan revision addressing the statutory and regulatory requirements. By contrast, area designations for the 1997 standards were finalized many years ago. As to those areas, after the court's decision in *NRDC* v. *EPA*, the EPA promulgated a rule setting a deadline of December 31, 2014, for states to submit any attainment plan provisions that may be necessary to satisfy the subpart 4 requirements. 79 FR 31566 (June 2, 2014) at 31570. This included any submissions necessary to address NNSR permitting such as the CAA section 189(e) requirement that states regulate all $PM_{2.5}$ precursors absent a demonstration that such regulation is unnecessary. This deadline superseded previous SIP submission deadlines initially established by application of the subpart 1 requirements. As that deadline has passed, if the EPA were to apply the 24-month phase-in policy strictly, states relying upon Appendix S to issue NNSR permits in these areas would have had to commence regulating VOC and ammonia as $PM_{2.5}$ precursors in June 2015—6 months after the SIP submission deadline. The EPA believes it is reasonable to provide states that have areas designated nonattainment with respect to the 1997 and 2006 $PM_{2.5}$ standards with at least some limited opportunity to consider the requirements of this rule and EPA's technical guidance and submit a plan revision addressing the statutory and regulatory requirements before the state will be required to regulate sources of VOC and ammonia in such areas. Accordingly, the EPA finds that it is reasonable to subject all areas designated nonattainment for any $PM_{2.5}$ standard as of April 15, 2015, to the same Appendix S requirements in this final rule.

For any area that is first designated nonattainment for any $PM_{2.5}$ NAAQS after April 15, 2015 (that is, the area was not already designated nonattainment with respect to another $PM_{2.5}$ NAAQS immediately prior to such date), any state relying on Appendix S to issue a NNSR permit on or after the effective date of such area designation must require control of SO_2 and NO_X as regulated NSR pollutants ($PM_{2.5}$ precursors). Beginning on the date 24 months from the effective date of such area designation, a state relying on Appendix S to issue a NNSR permit must also require control of VOC and ammonia as regulated NSR pollutants ($PM_{2.5}$ precursors) in that area, unless by that date the state has submitted a complete SIP revision that includes the state's proposed NNSR program for $PM_{2.5}$ and an accompanying NNSR precursor demonstration that sources of VOC, ammonia, or both ammonia do not contribute significantly to the $PM_{2.5}$ concentrations that exceed the standard in the $PM_{2.5}$ nonattainment area. *See* Appendix S, section II.A.31.(ii)(*b*)(*4*). As explained earlier, such demonstration must be submitted as part of a SIP revision that is determined to be complete by the EPA or deemed to be complete by operation of law by the conditional phase-in date.

As noted earlier, the second phase-in provision applies to $PM_{2.5}$ nonattainment areas that were not already designated as nonattainment for $PM_{2.5}$ immediately prior to that date. If at the time of a new designation, an area was already designated nonattainment as to any prior $PM_{2.5}$ NAAQS, and Appendix S applied and continues to apply for NNSR permitting with respect to that existing nonattainment area, all $PM_{2.5}$ precursors would likely already be required to be regulated in accordance with a prior phase-in schedule prescribed under Appendix S for that existing nonattainment designation. In such cases, all precursors would continue to be subject to regulation for NNSR permitting under Appendix S, even as to the new nonattainment designation. That is, once Appendix S definition of regulated NSR pollutant applies to all $PM_{2.5}$ precursors in a given nonattainment area, it is not possible to later defer regulation of any precursors so long as the state continues to rely on Appendix S for NNSR permitting in that area. Once the state submits a SIP including an NNSR program and any appropriate NNSR precursor demonstration, and the EPA approves the SIP, Appendix S will no longer apply for the issuance of NNSR permits for $PM_{2.5}$.

iii. Comments and Responses

Comment: Several commenters generally supported the EPA's preferred approach in the proposal that would require only SO_2 and NO_X as $PM_{2.5}$ precursors for NNSR permits issued pursuant to Appendix S. One commenter supported the alternative approach to phase in VOC and ammonia as $PM_{2.5}$ precursors, while another commenter expressly opposed the EPA's preferred approach and the phase-in alternative, claiming that any approach that does not regulate all four scientific precursors of $PM_{2.5}$ is contrary to CAA subpart 4 and unlawful.

Commenters supporting the preferred approach did not believe that it was appropriate to require NSR permitting during an interim period for sources that may be exempted from control requirements if a state can demonstrate that these sources do not contribute significantly to nonattainment in a particular area. These commenters stated that, since most, if not all, areas will not be able to demonstrate that SO_2 and NO_X do not contribute significantly to nonattainment levels of $PM_{2.5}$, the EPA's approach to include these two precursors in the interim is reasonable.

One commenter who supported the EPA's alternative approach to phase in VOC and ammonia as $PM_{2.5}$ precursors stated that there are many unanswered questions and the science is not adequate to justify regulation of secondary formation precursors at this time. The commenter further stated that Appendix S should initially require sources issued a NNSR permit to control only SO_2 and NO_X as $PM_{2.5}$ precursors, and only later, after a prescribed date (*e.g.*, the date on which SIP revisions based on subpart 4 requirements are due), require sources to control emissions of VOC and ammonia, if applicable.

A commenter who opposed any approach that did not immediately require the control of all four scientific precursors of $PM_{2.5}$ stated that such approaches are unlawful and must be rejected. The commenter stated that the EPA must require immediate regulation of all four precursors, as only that alternative follows the plain language of the CAA and the *NRDC* decision. The commenter objected to the presumptive exemption of VOC and ammonia emissions as being identical to the "gamesmanship" that both Congress intended to curtail with subpart 4, and that the DC circuit found illegal in the *NRDC* decision. The commenter stated that the scope of the statutory definition, and consequently the application of subpart 4, did not change when the EPA subdivided PM_{10} by regulation. The commenter stated that only this option would conform Appendix S to the requirements of subpart 4, and in so doing, align Appendix S with forthcoming state obligations to harmonize the $PM_{2.5}$ portions of their SIPs with the obligations of subpart 4. The commenter stated that this approach would encourage states to submit SIPs in a timely fashion, rather than to rely on Appendix S for an extended period of time. The commenter stated that, in contrast, were the EPA to adopt illegally lax provisions into Appendix S, states might delay submitting replacement SIPs, particularly in those parts of the country with high VOC or ammonia precursor emissions.

Response: The EPA took each of these comments into consideration in concluding that the proposed phase-in alternative is a reasonable approach that balances competing factors regarding the regulation of $PM_{2.5}$ precursors for NNSR permits issued pursuant to Appendix S. While CAA section 189(e) generally requires state plans to control all $PM_{2.5}$ precursors, it also affords states an opportunity to demonstrate that a particular precursor does not contribute significantly to levels of $PM_{2.5}$ that exceed the standard in a $PM_{2.5}$ nonattainment area. Section 189(e) of the CAA clearly addresses how $PM_{2.5}$ precursors must be regulated in the state's plan, but the statute does not address exactly when precursors are to be regulated pursuant to the NNSR requirements of Appendix S prior to the submission of the state's plan. As noted earlier, the NNSR provisions are unique among the nonattainment area requirements in that sources are required to address NNSR immediately upon the effective date of an area's designation to nonattainment, rather than upon the EPA's approval of the state's SIP, which could be as much as 3 years after the nonattainment area designation (*e.g.*, states have 18 months to submit attainment plans and the EPA may have up to 18 months from the date of the SIP submission to finalize action on such plans). Given this ambiguity in the statute and the unique application of the NNSR requirements, we believe a reasonable and balanced approach to the Appendix S requirements would allow states a time-limited period to submit a NNSR program for $PM_{2.5}$ that includes a NNSR precursor demonstration that sources of a precursor do not contribute significantly to $PM_{2.5}$ levels in a $PM_{2.5}$ nonattainment area. The time limit will discourage states from unreasonably delaying regulation of such precursors where otherwise required to do so.

Moreover, the EPA believes it is reasonable to construct the Appendix S provisions regulating $PM_{2.5}$ precursors in a manner that closely follows the way in which the precursors are being regulated in most state NSR programs based on EPA's 2008 NSR regulation. For areas that were designated attainment or unclassifiable prior to a new nonattainment designation, the PSD permit program was in effect and required that, at minimum, SO_2 and NO_X be regulated as $PM_{2.5}$ precursors. It is therefore reasonable to ensure that those precursors continue to be regulated as part of the interim NNSR permit program via Appendix S. Moreover, in areas that were already designated nonattainment for a pre-existing $PM_{2.5}$ NAAQS, and an approved plan containing NNSR permit requirements for $PM_{2.5}$ is in effect, sources are required to control SO_2 and NO_X as $PM_{2.5}$ precursors, as required under the 2008 $PM_{2.5}$ NSR rule, until the EPA approves a SIP revision conforming those NNSR programs to the requirements of CAA subpart 4. Similarly, the EPA believes it is reasonable to not require the regulation of VOC and ammonia immediately upon designation of an area to nonattainment because it result in more regulation in newly designated nonattainment areas relying on Appendix S than is required in most states with approved programs. All states will ultimately be required to address the regulation of ammonia and VOC at the time their state plans are due or, failing submission of such plan by states relying on Appendix S to issue NNSR permits, Appendix S will require such regulation.

The phase-in schedule contained in this final rule requires that VOC and ammonia be phased in as $PM_{2.5}$ precursors 24 months from the effective date of area designations for $PM_{2.5}$; however, states will not be required to control VOC and ammonia as $PM_{2.5}$ precursors as part of a NNSR permit issued under Appendix S so long as the state submits a plan revision that includes the state's NNSR program for $PM_{2.5}$ and a NNSR precursor demonstration to show that sources of a precursor does not contribute significantly to $PM_{2.5}$ levels that exceed the standard in a $PM_{2.5}$ nonattainment area. *See* Appendix S, sections II.A.31.(ii)(*b*)(*3*) and (*4*).

In initially requiring sources to control SO_2 and NO_X as regulated NSR pollutants ($PM_{2.5}$ precursors), states that rely on Appendix S to issue NNSR permits generally will implement NNSR consistent with those states that issue NNSR permits for $PM_{2.5}$ under the NNSR program in their approved SIP. The EPA believes that it is reasonable and appropriate to assure this consistency in the issuance of NNSR permits during the interim period when all states must revise their plans to address the 2012 $PM_{2.5}$ NAAQS. Moreover, this final rule allows states to submit a SIP revision that contains a NNSR precursor demonstration showing that new major stationary sources and major modifications of either SO_2 or NO_X should be exempted where an analysis of increases in emissions of the particular precursor shows that sources of the precursor do not contribute significantly to $PM_{2.5}$ levels that exceed the standard in the $PM_{2.5}$ nonattainment area. In this case, the opportunity to exempt sources of either SO_2 or NO_X as $PM_{2.5}$ precursors is addressed in the NNSR rules at 51.165. *See* 40 CFR 51.165(a)(13). Hence, when the EPA approves a state's plan revision containing the NNSR program for $PM_{2.5}$ and a NNSR precursor demonstration showing an insignificant contribution, a new major stationary source or major modification of either SO_2 or NO_X as $PM_{2.5}$ precursors will not be required to be controlled going forward in a NNSR permit issued to address $PM_{2.5}$, which permit would then be issued in accordance with the NNSR requirements in the approved plan, rather than the NNSR requirements in Appendix S.

With regard to the commenter's concern that states might delay submitting NNSR programs as part of their $PM_{2.5}$ SIPs if Appendix S regulates only SO_2 and NO_X, the phase-in approach in this final rule will negate any incentive that a state may have to delay submitting an NNSR program for $PM_{2.5}$ addressing the CAA section 189(e) requirement to regulate all four precursors, absent a showing that such regulation is unnecessary. In fact, the phase-in requirement should actually encourage states to timely submit their NNSR programs for $PM_{2.5}$. Given CAA section 189(e) does not directly speak to its application to the Appendix S requirements, the EPA believes this approach represents a reasonable and equitable application of the CAA section 189(e) requirements regarding regulation of $PM_{2.5}$ precursors to states applying Appendix S.

b. Appendix S Definition of "major stationary source" in Serious $PM_{2.5}$ Nonattainment Areas

i. Summary of Proposal

The EPA proposed to amend Appendix S by revising the definition of "major stationary source" to include a separate $PM_{2.5}$ major source threshold applicable to new major stationary sources and major modifications of direct $PM_{2.5}$ and $PM_{2.5}$ emissions in $PM_{2.5}$ nonattainment areas reclassified as Serious. This proposed amendment to Appendix S was similar to one that was proposed to the definition of "major stationary source" in 40 CFR 51.165.[234]

ii. Final Rule

In this final rule, the EPA is amending the definition of "major stationary source" in Appendix S to include 70 tpy major source thresholds for direct $PM_{2.5}$ emissions and individual $PM_{2.5}$ precursors, applicable in Serious $PM_{2.5}$ nonattainment areas.[235] *See* Appendix S sections II.A.4(i)(*a*)(*7*) and (*8*), respectively. As described earlier, applicability of the NNSR requirements to a source will be determined individually for direct $PM_{2.5}$ emissions and for emissions of individual $PM_{2.5}$ precursors. For example, if a new source locating in a Serious $PM_{2.5}$ nonattainment area would emit 70 tpy of the $PM_{2.5}$ precursor SO_2, it will be considered a major source of $PM_{2.5}$ (with respect to the SO_2 precursor) and will be subject to the NNSR requirements for $PM_{2.5}$ with regard to the SO_2 emissions. However, if the same proposed source does not emit 70 tpy of direct $PM_{2.5}$ emissions or another $PM_{2.5}$ precursor, the emissions increase of direct $PM_{2.5}$ or the other precursor will not be subject to control based on the NNSR requirements for $PM_{2.5}$. It should also be noted that VOC and ammonia are subject to the phase-in schedule described in the definition of "regulated NSR pollutant" in the NNSR regulations at Appendix S, section II.A.31.(ii)(*b*)(*2*).

iii. Comments and Responses

As explained in Section VIII.B.1.b of this preamble, commenters addressing the proposed major source threshold of 70 tpy for sources of $PM_{2.5}$ and its precursors locating in Serious areas had mixed responses, particularly with regard to the appropriate thresholds for precursors. Most of the comments applied generally to the proposed thresholds in 40 CFR 51.165 and Appendix S. The EPA's responses to these comments are provided in that earlier section of the preamble.

Comment: One commenter, however, recommended that during the SIP transition period (and while the EPA continues its analysis of the precursor relationships to $PM_{2.5}$), the EPA should allow states to make a case-by-case permitting demonstration to use higher major source thresholds for precursors for NNSR permit reviews.

Response: As explained previously, in light of the ongoing precursor impact studies as well as concerns about the legality of setting higher major source thresholds than those specified in the CAA, the EPA believes it is most reasonable to establish a 70 tpy major source threshold under Appendix S for sources of direct $PM_{2.5}$ emissions and each $PM_{2.5}$ precursor locating in Serious nonattainment areas.

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[234] The preamble language did not explicitly state that it was our intent to revise the definition in Appendix S to add separate major source thresholds for direct $PM_{2.5}$ emissions and $PM_{2.5}$ precursors, in the same way that earlier we had proposed to revise the definition of "major stationary source" in the NNSR regulations at 40 CFR 51.165. Instead, the preamble referred only to a change to the definition of "major stationary source" at proposed section II.A.4(i)(*a*)(*7*) of Appendix S, where a 70 tpy threshold for direct $PM_{2.5}$ emissions is addressed. The proposed regulatory text did, however, also include new section II.A.4(i)(*a*)(*8*) of Appendix S, which adds a 70 tpy major source threshold for emissions of individual $PM_{2.5}$ precursors. Despite this omission in the preamble discussion of the proposed changes to Appendix S, we believe that commenters had ample opportunity to comment on the actual changes being made to the definition of "major stationary source" in Appendix S because the intended change concerning emissions of $PM_{2.5}$ and $PM_{2.5}$ precursors was accurately provided in the regulatory text.

[235] The EPA also notes that the definition of "major stationary source" in Appendix S is being revised in this rule at section II.A.4(i)(a) of Appendix S, which currently ends with the phrase "according to paragraphs II.A.4(i)(a)(*1*) through (*6*) of this ruling." By proposing to add new paragraphs (*7*) and (*8*), this phrase will be revised to read "according to paragraphs II.A.4(i)(a)(*1*) through (*8*) of this ruling." The phrase is being modified accordingly in this final rule.

c. Significant Emissions Rates (SERs) in Appendix S—$PM_{2.5}$ Precursors

i. Summary of Proposal

As explained earlier, the EPA proposed as its preferred approach to add NO_X as a $PM_{2.5}$ precursor in the Appendix S definition of "regulated NSR pollutant." Accordingly, the EPA also proposed to amend the definition of "significant" at section II.A.10(i) of Appendix S to establish a SER of 40 tpy for NO_X as a $PM_{2.5}$ precursor. The Appendix S definition already contains a SER for SO_2 as a $PM_{2.5}$ precursor at 40 tpy of SO_2. The EPA did not explicitly propose to include SERs for VOC and ammonia in Appendix S as part of the preferred approach; however, the EPA's proposed alternative approach to phase in VOC and ammonia as $PM_{2.5}$ precursors at a later date would inherently necessitate adding SERs for those two additional precursors in the event that an alternative approach was ultimately selected for the final rule.

ii. Final Action

The EPA is revising the definition of "significant" in Appendix S at section II.A.31(ii)(*b*)(*2*) to provide SERs for NO_X and VOC as $PM_{2.5}$ precursors, consistent with its decision to conditionally phase in regulation of all four $PM_{2.5}$ precursors 24 months from the date of redesignation. The individual SERs for NO_X and VOC as $PM_{2.5}$ precursors, being added to the existing SER for SO_2 as a $PM_{2.5}$ precursor, are each defined as 40 tpy of the respective precursor, consistent with the SERs provided in the revised definition of significant in 40 CFR 51.165.

The EPA is not adding a SER for ammonia (as a $PM_{2.5}$ precursor) in the Appendix S definition of "significant" in this action. Consistent with the EPA's approach for allowing states to define "significant" for ammonia in their NNSR rules, and for the reasons explained in Section VIII.B.1.*c* of this preamble, the EPA will allow states that issue NNSR permits pursuant to the requirements in Appendix S to define "significant" with respect to ammonia in a particular area in each NNSR permit issued pursuant to Appendix S. The state should provide a technical justification to support the definition of "significant" for ammonia, including any SER developed by the state for a particular nonattainment area, and such justification should be included in the administrative record for each proposed permit. The state also has the discretion to define "significant" with respect to ammonia as a $PM_{2.5}$ precursor in those cases where it is determined that the proposed modification will result in insignificant increases of ammonia and the source will therefore not be required to obtain a major NNSR permit. In such cases, the state and the source should also document the technical justification for determining the source impacts will be insignificant, including any SER developed by the state for a particular nonattainment area, whether such documentation occurs in the administrative record for a minor source permit, a nonapplicability determination, or some other form in the state or source's records. The state should consult with the appropriate EPA Regional Office for assistance in developing an appropriate definition of "significant" for ammonia as a $PM_{2.5}$ precursor in each permit or for each nonattainment area.

iii. Comments and Responses

The comments regarding the proposed addition of SERs for NO_X and VOC emissions as $PM_{2.5}$ precursors in the NNSR definition of "significant" were summarized in Section VIII.B.1.c of this preamble. Those comments applied generally to the NNSR regulations at 40 CFR 51.165 and Appendix S. The reader is referred to that earlier section of the preamble to review the comments and the EPA's responses to them.

Comment: Some commenters seemingly addressing NNSR under Appendix S recommended that the EPA include a provision allowing states to make case-by-case determinations to use higher SERs for precursors for NNSR permits issued before the SIP is effective. The commenter stated that the precursor SERs are too low and do not realistically reflect the effect that each precursor has on ambient $PM_{2.5}$ concentrations.

Response: The EPA believes that the commenter's concern is partially addressed by the fact that, in using Appendix S to review NNSR permit applications, neither VOC nor ammonia will need to be controlled as $PM_{2.5}$ precursors if the state has submitted to the EPA a complete SIP submission that includes the state's NNSR program for $PM_{2.5}$ and a NNSR precursor demonstration showing that a particular precursor does not contribute significantly to ambient concentrations of $PM_{2.5}$ in the nonattainment area, even though the plan revision containing such demonstration has not yet been formally approved. Until the SIP development period has passed and unless the state has failed to submit such a demonstration, the state issuing permits pursuant to Appendix S will not be required to regulate VOC or ammonia as $PM_{2.5}$ precursors. If a state has not submitted a SIP including the state's NNSR program for $PM_{2.5}$ and a NNSR precursor demonstration for either VOC or ammonia, sources of these precursor emissions must be controlled as $PM_{2.5}$ precursors in any NNSR permit issued pursuant to Appendix S beginning on the prescribed phase-in date.

C. Transition Provisions for Major Source Permitting in $PM_{2.5}$ Nonattainment Areas

The EPA did not propose any transition provisions for NNSR permit applications in either 40 CFR 51.165 or Appendix S that would expressly grandfather pending PSD or NNSR permit applications for proposed new and modified major stationary sources from newly established NNSR permit requirements applicable to $PM_{2.5}$ nonattainment areas. In the final 2012 PM NAAQS Rule, the EPA provided a grandfathering provision only for certain PSD permit applications with respect to the revised $PM_{2.5}$ standard. Historically, the EPA has not provided for the grandfathering of any permit applications from new NNSR requirements or from application of existing NNSR requirements to new or revised standards. Nevertheless, in promulgating the 2012 PM NAAQS Rule, the EPA received unsolicited comments advocating for grandfathering of NNSR requirements for the revised standard. Thus, while explaining the reasons why it did not believe that NNSR grandfathering was appropriate, the EPA sought comments in the proposal on possible circumstances where grandfathering similar to the PSD grandfathering provision established for the 2012 $PM_{2.5}$ standard might be appropriate with respect to changes made regarding NNSR requirements for $PM_{2.5}$ in this rulemaking.

Several comments received during the 2012 p.m. NAAQS rulemaking recommended that the EPA establish a grandfathering provision for NNSR as was proposed for the PSD program. A subset of these commenters recommended that PSD permit applications be grandfathered from the NNSR requirements for the revised 2012 $PM_{2.5}$ standard by establishing an effective date for designations 1 year after initial publication in the **Federal Register**. The commenters presumably believed that by delaying the effective date of any new nonattainment designations for the primary annual $PM_{2.5}$ NAAQS, sources with pending PSD permit applications could continue to be reviewed and permits issued under the PSD requirements rather than the NNSR requirements for $PM_{2.5}$.

The EPA explained at the time that the obligation to adopt new provisions under a state's NNSR program will not apply with regard to the revised NAAQS until such time as an area is designated nonattainment, and beginning on the effective date of the new area designations for $PM_{2.5}$, proposed new and modified major sources would be required to meet the applicable NNSR requirements for $PM_{2.5}$.[236] Also, the EPA does not agree with the commenters' recommendation that the effective date of the area designation be delayed by 1 year because this approach, similar to delaying the effective date of the NAAQS, would also delay the implementation of the attainment plan and defer the important health benefits associated with the revised NAAQS. In the same preamble, the EPA proposed a schedule for promulgating area designations for $PM_{2.5}$ that involved the maximum allowable 2-year period from the signature date of the 2012 $PM_{2.5}$ NAAQS, as provided in CAA section 107(d)(1)(B). The CAA allows for a 1-year extension for such designations, but only if there is insufficient information to enable such designations to be made.[237]

In response to the EPA's request for comments in the proposal, commenters recommended that the EPA clarify the $PM_{2.5}$ NSR grandfather policy to explain that both PSD and NNSR permit applications are exempt from the precursor and planning requirements being finalized in this rulemaking. In particular, the commenters recommended that the EPA establish a $PM_{2.5}$ NSR transition policy that delays regulation of the scientific precursors of $PM_{2.5}$ under any NSR program until the EPA has a better understanding of how these precursors contribute to nonattainment and could deteriorate air quality. One of the commenters indicated that a transitional policy is especially important until the EPA completes a rulemaking on a SER for ammonia. One of the commenters recommended that the EPA should allow for the grandfathering of pending PSD permit applications, similar to the PSD grandfathering provision for the 2012 $PM_{2.5}$ NAAQS, for sources that will not be issued a permit until after the effective date of the nonattainment designation under certain conditions. This commenter stated that CAA section 165(c), which forms part of the EPA's basis for grandfathering in the PSD context, should also apply to NNSR permit decisions.

The EPA does not find a compelling reason to grandfather pending NNSR permit applications for which a permit has not yet issued once the new NNSR requirements—primarily affecting the control of $PM_{2.5}$ precursors—become effective. The EPA believes that it is reasonable to require that a new or modified major stationary source control emissions of $PM_{2.5}$ precursors where such emissions contribute significantly to $PM_{2.5}$ levels in the nonattainment area. If such precursor emissions are not effectively controlled, and offset by reductions in existing emissions, an increased burden could be placed on the overall attainment plan to address those emissions in order to attain the NAAQS in a timely manner.

While the final rule contains no general grandfathering provision, this final rule does provide a phase-in process for states relying on Appendix S for purposes of issuing NNSR permits for $PM_{2.5}$. Appendix S will require the immediate regulation of SO_2 and NO_X as $PM_{2.5}$ precursors, the regulation of VOC and ammonia as $PM_{2.5}$ precursors will only be required under certain conditions and on a delayed timetable. *See* Appendix S, revised section II.A.31.(ii)(*b*)(*2*)–(*5*). The precursor provisions in Appendix S should alleviate some of the commenter's concerns that the regulation of additional precursors will be required immediately upon the effective date of this final rule. Instead, the phase-in schedule for the regulation of VOC and ammonia will permit states the opportunity allowed by CAA section 189(e) to demonstrate that a particular precursor need not be subjected to control in a particular nonattainment area. Accordingly under the interim NNSR requirements in Appendix S, a state will not be required to begin immediate regulation of precursors for which sources will likely be exempted from the regulations upon review of a state's NNSR SIP submission. Similarly, where the state has a previously approved NNSR program for $PM_{2.5}$, the existing requirements for controlling precursors would continue to apply until the new SIP revisions required by this rule, including new precursor control requirements, are approved. Thus, such states would not be required to immediately regulate any $PM_{2.5}$ precursors not already required by the approved plan during the interim plan development period.

With regard to grandfathering PSD permit applications, we do not interpret the CAA to allow for the issuance of a PSD permit in an area that is designated nonattainment. The CAA requires proposed major stationary sources and major modifications to meet major NSR permitting requirements that apply on the basis of the area's designation.[238] Accordingly, the EPA's longstanding interpretation of the CAA is that a proposed new major stationary source or major modification must satisfy the appropriate major NSR requirements (PSD vs. NNSR) for a particular pollutant that are in effect in a given area on the date that a permit is issued to the source, rather than the requirements that may have been applicable when the permit application was submitted.[239]

IX. Other Requirements and Considerations for $PM_{2.5}$ Nonattainment Areas

A. Waivers Under CAA Section 188(f)

1. Statutory Requirements and Existing Guidance

a. Summary of Proposal. The proposal summarized the statutory requirements and existing guidance for CAA section 188(f), which provides that, "the Administrator may, on a case-by-case basis, waive any requirement applicable to any Serious Area . . . where the Administrator determines that anthropogenic sources of PM_{10} do not contribute significantly to the violation of the PM_{10} standard in the area." In addition it provides that, "the Administrator may also waive a specific date for attainment of the [PM_{10}] standard where the Administrator determines that nonanthropogenic sources of PM_{10} contribute significantly to the violation of the PM_{10} standard in the area." The agency requested comment on whether the existing guidance in the Addendum is appropriate when implementing the current and any future $PM_{2.5}$ NAAQS.

b. Final Rule. The EPA is hereby affirming its reliance on the interpretation of CAA section 188(f) described in the Addendum for purposes of implementing the $PM_{2.5}$ NAAQS.[240] For example, the Addendum lays out a series of questions that should be answered before the waiver provisions can be applied, including questions related to the types of sources that may be considered anthropogenic and nonanthropogenic, the specific conditions under which the attainment date for a Moderate area may be waived, and the time period that would apply to an attainment date waiver. The EPA believes that these questions, and the general guidance provided in the Addendum on how to evaluate the answers, provide adequate direction to the EPA and to states potentially interested in seeking waivers for certain $PM_{2.5}$ NAAQS nonattainment areas. The EPA therefore refers interested states to the waiver guidance contained in the Addendum for more detail on how the agency interprets CAA section 188(f) for purposes of implementing the $PM_{2.5}$ NAAQS.

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[236] The applicable NNSR requirements would be either the NNSR requirements for $PM_{2.5}$ in the state's existing approved SIP or the requirements found at 40 CFR part 51 Appendix S, when a state's approved SIP does not currently include NNSR requirements for $PM_{2.5}$. States will be required to submit to the EPA for approval SIP revisions containing the amended NNSR program requirements for $PM_{2.5}$ contained in the final $PM_{2.5}$ NAAQS implementation, but those additional requirements will not apply in states with approved SIPs that include NNSR requirements for $PM_{2.5}$ until the EPA approves the SIP revision. *See* 78 FR 3086 (January 15, 2013), at page 3263.

[237] *See* 78 FR 3249 at page 3250.

[238] *Compare* CAA section 165(a) (permitting requirements for sources locating in attainment and unclassifiable areas) *with* CAA sections 172(c)(5) and 173 (permitting requirements for sources locating in nonattainment areas).

[239] *See* Memorandum from John S. Seitz, Director, EPA Office of Air Quality Planning and Standards, on March 11, 1991, titled "New Source Review (NSR) Transitional Guidance," Attachment p. 6, sent to Regional Air Division Directors.

c. Comments and Responses. The comments received on this section are addressed in the Response to Comments document found in the docket for this action.

2. Relationship Between the CAA Section 188(f) Waiver Provisions and the EPA's Exceptional Events Rule

a. Summary of Proposal. The proposal summarized the relationship between the 188(f) waiver provisions and the EPA's Exceptional Events Rule. On March 22, 2007, the EPA promulgated the "Treatment of Data Influenced by Exceptional Events; Final Rule" (72 FR 13560), known as the Exceptional Events Rule, pursuant to the 2005 amendment of CAA section 319.[241] The Exceptional Events Rule provides a mechanism by which the EPA can concur with a state's request to exclude from regulatory decisions air quality monitoring data determined by the EPA to have been affected by exceptional events.[242] The Exceptional Events Rule applies to all the NAAQS pollutants, including $PM_{2.5}$. CAA section 188(f) and the Exceptional Events Rule provide separate mechanisms by which states can seek to have event-influenced monitoring data excluded from certain regulatory requirements or decisions associated with the PM NAAQS implementation process, under appropriate circumstances.

b. Final Rule. The EPA did not make any revisions to its interpretation of the relationship between the CAA section 188(f) waiver provisions and EPA's Exceptional Events Rule.

The Exceptional Events Rule addresses elevated emissions from specific events that influence monitored air quality concentrations. The EPA's regulations at 40 CFR 50.1(j) define an "exceptional event" as one that "affects air quality, is not reasonably controllable or preventable, is an event caused by human activity that is unlikely to recur at a particular location or a natural event, and is determined by the Administrator in accordance with 40 CFR 50.14 to be an exceptional event." Further, 40 CFR 50.1(j) explicitly provides that exceptional events do ". . . not include stagnation of air masses or meteorological inversions, a meteorological event involving high temperatures or lack of precipitation, or air pollution relating to source noncompliance." At 40 CFR 50.1(k), the EPA's regulations define a "natural event" as an event in which human activity plays little or no direct causal role to the event in question.[243]

Air quality monitoring data that the EPA determines to have been influenced by an exceptional event under the procedural steps, substantive criteria, and schedule specified in the Exceptional Events Rule may be excluded from regulatory decisions such as initial area designations decisions and decisions associated with implementing the $PM_{2.5}$ NAAQS such as clean data determinations, evaluation of attainment demonstrations, and discretionary or mandatory reclassifications of nonattainment areas from Moderate to Serious. While the EPA may agree with a state's request to exclude event-influenced air quality monitoring data from regulatory decisions, these regulatory actions require the EPA to provide an opportunity for public comment on the claimed exceptional event and all supporting data prior to the EPA taking final agency action.

If wildfire is a potential contributor to exceedances of the NAAQS and exceptional events, the EPA urges state and local agencies to coordinate with the land management agencies, as appropriate, in developing plans and appropriate public communications regarding public safety and reducing exposure. This action can directly help states meet their Exceptional Events Rule obligation whereby "states must provide public notice, public education, and must provide for implementation of reasonable measures to protect public health when an event occurs." When wildfire impacts are significant in a particular area, states and communities may be able to lessen the impacts of wildfires by working collaboratively with land managers and land owners to employ various mitigation measures including taking steps to minimize fuel loading in areas vulnerable to fire.

The EPA notes that there could be some potential overlap between the application of the Exceptional Events Rule and CAA section 188(f) because the conditions necessary for the Administrator to make a determination under CAA section 188(f)—*i.e.*, the lack of a significant anthropogenic contribution to a violation—may overlap with conditions that may be considered an exceptional event, particularly a natural event, which by definition represents a non-anthropogenic contribution. The EPA believes that this potential for overlap can best be addressed by considering the applicability of the Exceptional Events Rule and CAA section 188(f) in sequence. Thus, the EPA recommends that states first consider whether the monitored air quality data on specific days were influenced by an exceptional event. If the state requests and the EPA agrees with this request and determines that the monitored air quality data should be excluded from consideration in regulatory decisions, then using the provisions in the Exceptional Events Rule could address the situation adequately, and there would be no need for a CAA section 188(f) waiver. If the state determines that, even with the exclusion of the event-influenced data, the waiver provisions of CAA section 188(f) may also be applicable, then the EPA can evaluate that question based on the remaining data that are representative for the area in question. Given that section 188(f) has rarely been invoked, a state wishing to pursue this provision should work closely with its EPA Regional Office.

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[240] *See* 59 FR 42003–42008, August 16, 1994.

[241] Section 319 of the CAA, as amended by section 6013 of the Safe Accountable Flexible Efficient-Transportation Equity Act: A Legacy for Users (SAFE–TEA–LU) of 2005, required the EPA to propose and promulgate regulations governing the review and handling of air quality monitoring data influenced by exceptional events.

[242] References to "air agencies" are meant to include state, local and tribal air agencies responsible for implementing the Exceptional Events Rule.

[243] The EPA will generally consider human activity to have played little or no *direct* role in causing emissions of the dust generated by high wind for purposes of the regulatory definition of "natural event" if contributing anthropogenic sources of the dust are reasonably controlled at the time of the event, regardless of the amount of dust coming from these reasonably controlled anthropogenic sources, and thus the event could be considered a natural event. In such cases, the EPA believes that it would generally be a reasonable interpretation of its regulations to find that the anthropogenic source had "little" direct causal role. If anthropogenic sources of windblown dust that are reasonably controllable but that did not have those reasonable controls applied at the time of the high wind event have contributed significantly to a measured concentration, then the event would not be considered a natural event. *See* preamble to the Exceptional Events Rule at 72 FR 13560 (March 22, 2007), footnote 11 on page 13566.

c. Comments and Responses. *Comments:* Some commenters urged the EPA to clarify the two-step approach. Some commenters recommended that the EPA refrain from directing the sequence and allow states to decide which of these provisions should apply in the specific circumstances that they are addressing, consistent with the commenter's overall recommendation that the EPA give states the maximum flexibility in developing $PM_{2.5}$ SIPs. Some commenters urged the EPA to provide guidance to the states on when this two-step approach would be appropriate, and when it would be inappropriate. Commenters did not want implementation planning to follow the EPA's exceptional events justification model in which there is great variability among the EPA regions. Commenter encouraged the EPA to work to ensure that $PM_{2.5}$ implementation plan reviews are subject to similar requirements in all EPA regions with clarifying language in the final guidance to ensure some level of national consistency.

Response: The EPA agrees with the first comment that, rather than the EPA "directing the sequence," the affected state and the appropriate EPA regional office should discuss the scenario and the affected data to determine whether the Exceptional Events Rule or CAA section 188(f) is the most appropriate mechanism. This decision would be made on a case-by-case basis considering the specific, relevant facts. In most cases, if the monitored air quality data satisfy the requirements of the Exceptional Events Rule, then applying these provisions would likely provide additional regulatory flexibilities beyond those that CAA section 188(f) would provide. However, regardless of whether the data in question meet or do not meet the requirements of the Exceptional Events Rule (*e.g.*, because the exceptional events definition is not met in that the data do not constitute an exceedance or violation of the NAAQS or because other Exceptional Events rule criteria are not met), the waiver provisions in CAA section 188(f) could apply.

The EPA recognizes the implementation challenges associated with the 2007 Exceptional Events Rule and recently proposed revisions to this rule to address certain substantive issues raised by state, local and tribal co-regulators and other stakeholders since promulgation of the rule and to increase the administrative efficiency of the Exceptional Events Rule criteria and process (80 FR 72840, November 20, 2015). The public comment period on this rule closed on February 3, 2016. The EPA will consider timely comments provided to the Exceptional Events Rule docket as we finalize the revisions to this rule.

B. Conformity Requirements

1. Requirements That Apply to Both Transportation Conformity and General Conformity

a. Background on Transportation and General Conformity. Conformity is required under CAA section 176(c) to ensure that federal actions are consistent with ("conform to") the purpose of the SIP. Conformity to the purpose of the SIP means that federal activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS or interim reductions and milestones. Conformity applies to areas that are designated nonattainment, and those nonattainment areas redesignated to attainment with a CAA section 175A maintenance plan after 1990 ("maintenance areas").

The EPA's Transportation Conformity Rule (40 CFR 51.390 and part 93, subpart A) establishes the criteria and procedures for determining whether transportation activities conform to the SIP. These activities include adopting, funding or approving transportation plans, transportation improvement programs (TIPs) and federally supported highway and transit projects. The EPA first promulgated the Transportation Conformity Rule on November 24, 1993 (58 FR 62188), and subsequently published several amendments. For example, the EPA published a final rule on July 1, 2004 (69 FR 40004) that provided conformity procedures for state and local agencies under the 1997 $PM_{2.5}$ NAAQS, among other things. On May 6, 2005 (70 FR 24280) the EPA published a final rule that addressed transportation conformity requirements for $PM_{2.5}$ precursors.[244] The EPA published another final rule on March 24, 2010 (75 FR 14260) that addressed additional requirements for the 2006 $PM_{2.5}$ NAAQS. Finally, the EPA published a final rule on March 14, 2012 (77 FR 14979) that restructured portions of the transportation conformity rule so that they would clearly apply to nonattainment and maintenance areas for the new and revised NAAQS, including the 2012 $PM_{2.5}$ NAAQS. All of these rules apply to the current $PM_{2.5}$ NAAQS including the 1997 $PM_{2.5}$ NAAQS, the 2006 24-hour $PM_{2.5}$ NAAQS and the 2012 primary annual $PM_{2.5}$ NAAQS and will apply to future $PM_{2.5}$ NAAQS. For further information on transportation conformity rulemakings, policy guidance and outreach materials, *see* the EPA's Web site at *http://www3.epa.gov/otaq/stateresources/transconf/index.htm.* The EPA issued transportation conformity guidance related to the implementation of the 2012 primary annual $PM_{2.5}$ NAAQS in November 2015. The guidance is available at *http://www3.epa.gov/otaq/stateresources/transconf/documents/420b15091.pdf.*

With regard to general conformity, the EPA first promulgated general conformity regulations in November 1993 (40 CFR part 51, subpart W and 40 CFR part 93, subpart B). Subsequently, the EPA finalized revisions to the general conformity regulations on April 5, 2010. (75 FR 17254–17279) The general conformity program ensures that federal actions not covered by the transportation conformity rule will not interfere with the SIP. General conformity also fosters communications between federal agencies and state/local air quality agencies, provides for public notification of and access to federal agency conformity determinations and allows for air quality review of individual federal actions. More information on the general conformity program is available at *www.epa.gov/airquality/genconform/.*

b. Conformity in the Proposed Rule. The EPA did not propose any changes to the transportation conformity program as part of the current action. Nevertheless, to provide clarity in applying those regulations, the EPA is providing affected parties with information on when conformity must be implemented after nonattainment areas are designated for a new or revised $PM_{2.5}$ NAAQS. At this time the EPA is using the 2012 $PM_{2.5}$ NAAQS as an example. The agency is also discussing how it plans to make the transition from demonstrating conformity for the 1997 annual $PM_{2.5}$ NAAQS to the 2012 primary annual $PM_{2.5}$ NAAQS because this transition is unique in that the 1997 annual $PM_{2.5}$ NAAQS was retained as a secondary NAAQS. Finally, we proposed a change to the general conformity rule that addresses *de minimis* levels that apply to federal actions in $PM_{2.5}$ areas. The information presented here is consistent with existing conformity regulations and statutory provisions that are not addressed by this $PM_{2.5}$ implementation rulemaking. Affected parties would include state and local transportation and air quality agencies, metropolitan planning organizations (MPOs), and all federal agencies including the U.S. Department of Transportation, the U.S. Department of Defense, the U.S. Department of Interior and the U.S. Department of Agriculture.

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[244] This final rule was not challenged, nor was it affected by the January 2013 D.C. Circuit Court decision requiring the EPA to implement the $PM_{2.5}$ NAAQS pursuant to subpart 4 of the CAA.

c. Applicability of Transportation and General Conformity to Areas Designated Nonattainment for the 2012 Primary Annual $PM_{2.5}$ NAAQS. Transportation and general conformity apply 1 year after the effective date of nonattainment designations for a new or revised $PM_{2.5}$ NAAQS including the 2012 primary annual $PM_{2.5}$ NAAQS, April 15, 2016. This is because CAA section 176(c)(6) provides a 1-year grace period from the effective date of initial designations for any new NAAQS before transportation and general conformity apply in areas newly designated nonattainment for a specific pollutant and the NAAQS. With regard to general conformity, the EPA's April 2010 revisions to its general conformity regulations (*see* 75 FR 17277, April 5, 2010) apply the same 1-year grace period for the purposes of general conformity.

With regard to transportation conformity, the conformity grace period applies to all areas designated nonattainment for a new or revised $PM_{2.5}$ NAAQS including the 2012 primary annual $PM_{2.5}$ NAAQS. The requirements differ depending on whether the nonattainment area includes any part of an MPO area designated under 23 U.S.C. 134 or is an isolated rural area. Within 1 year after the effective date of the initial nonattainment designation for a given pollutant and the NAAQS, the MPOs and DOT must make a transportation conformity determination with regard to that pollutant and standard for all of the metropolitan transportation plans and TIPs in the nonattainment area. The conformity requirements for surrounding "donut areas," including the application of the 1-year conformity grace period, are generally the same as those for metropolitan areas.[245] For the purposes of the implementation of the 2012 $PM_{2.5}$ NAAQS, MPOs and any adjacent donut areas in a 2012 $PM_{2.5}$ nonattainment area must continue to meet conformity requirements during the grace period for any other applicable NAAQS, including the 1997 annual $PM_{2.5}$ NAAQS and the 2006 24-hour $PM_{2.5}$ NAAQS. If, at the end of the grace period for the 2012 annual $PM_{2.5}$ NAAQS, the MPO and DOT have not made a transportation plan and TIP conformity determination for that NAAQS, the area would be in a conformity "lapse." During a conformity lapse, only certain projects can receive federal funding or approvals to proceed. The practical impact of a conformity lapse will vary from area to area. Finally, the 1-year conformity grace period also applies to project level conformity determinations.

Isolated rural nonattainment and maintenance areas are areas that do not contain or are not part of an MPO (40 CFR 93.101). Transportation conformity requirements for isolated rural nonattainment and maintenance areas can be found at 40 CFR 93.109(g). The CAA section 176(c)(6) 1-year grace period for newly designated nonattainment areas applies to isolated rural areas. Therefore, 1 year after the effective date of the initial nonattainment designation for a given pollutant and the NAAQS, conformity requirements with regard to that pollutant and standard would apply in any nonattainment areas that are isolated rural areas. Per the transportation conformity rule, an isolated rural area would be required to make a transportation conformity determination only at the point when an applicable transportation project needs funding or approval. This project level conformity determination may occur significantly after the 1-year grace period has ended. *See* the EPA's transportation conformity guidance related to the implementation of the 2012 primary annual $PM_{2.5}$ NAAQS for further information on how the EPA has implemented this conformity grace period in metropolitan, donut and isolated rural areas. The guidance is available at ***http://www3.epa.gov/otaq/stateresources/transconf/documents/420b15091.pdf.***

d. Applicability of Transportation and General Conformity With Regard to the 1997 Annual $PM_{2.5}$ NAAQS, Which was Retained as a Secondary NAAQS. In the December 2012 PM NAAQS final rule, the EPA established a new health-based *primary* annual $PM_{2.5}$ NAAQS of 12.0 μg/m³. In that same action the EPA retained the 1997 annual $PM_{2.5}$ NAAQS of 15.0 μg/m³ as a *secondary* NAAQS to protect against certain welfare effects. In the 1997 $PM_{2.5}$ designations rule (70 FR 944), the EPA designated areas nonattainment for both the 1997 primary and secondary annual $PM_{2.5}$ NAAQS (which have identical levels of 15.0 μg/m³). Designations for the 2012 primary annual $PM_{2.5}$ NAAQS were made in January 2015 (80 FR 2206) and were effective on April 15, 2015. This action did not make any changes to the designations that apply for the 1997 secondary annual $PM_{2.5}$ standard. Therefore, at this time, all areas designated nonattainment in 2005 for the 1997 annual $PM_{2.5}$ standard are considered as having been designated nonattainment for both the 1997 primary annual $PM_{2.5}$ NAAQS and for the 1997 secondary annual $PM_{2.5}$ NAAQS. Similarly, for any 1997 $PM_{2.5}$ nonattainment areas that have approved redesignation requests for attainment of the 1997 $PM_{2.5}$ NAAQS, the redesignation applies to both the primary and secondary standards of the 1997 $PM_{2.5}$ NAAQS. A discussion of how transportation and general conformity apply in this situation follows.

CAA section 176(c)(5) requires compliance with transportation and general conformity only in: (1) Nonattainment areas and (2) areas that have been redesignated to attainment and are required to develop a maintenance plan under CAA section 175A.

CAA section 175A(a), in turn, establishes the requirements that must be fulfilled by nonattainment areas in order to be redesignated to attainment. That section only requires that nonattainment areas for the *primary* standard submit a plan addressing maintenance of the *primary* NAAQS in order to be redesignated to attainment; it does not require nonattainment areas for secondary NAAQS to submit maintenance plans in order to be redesignated to attainment. *See* 42 U.S.C. 7505a(a) Therefore, since conformity does not apply in areas that have been redesignated without CAA section 175A maintenance plans, the EPA concludes that transportation and general conformity do not apply in areas that have been redesignated to attainment for any secondary NAAQS, such as the 1997 secondary annual $PM_{2.5}$ NAAQS.

Elsewhere in this final rule, the EPA is finalizing one of the proposed options for revoking the 1997 primary annual $PM_{2.5}$ NAAQS, which has been replaced by the more health protective 2012 primary annual $PM_{2.5}$ NAAQS. As discussed in detail in Section X of this preamble, the EPA is finalizing the option that calls for revoking the 1997 primary annual $PM_{2.5}$ NAAQS in areas that have always been designated attainment for that NAAQS and in areas that have been redesignated to attainment for that NAAQS. As a result, after the effective date of the revocation, areas that have been redesignated to attainment for the 1997 annual $PM_{2.5}$ NAAQS (*i.e.,* maintenance areas for the 1997 annual $PM_{2.5}$ NAAQS) will not be required to make transportation or general conformity determinations for the 1997 annual $PM_{2.5}$ NAAQS. The revocation would leave nonattainment designations in place for the 1997 annual NAAQS for areas that have not yet been redesignated to attainment for that NAAQS. The EPA will continue to redesignate areas to attainment as states submit redesignation requests for the remaining nonattainment areas. Any area that is designated as nonattainment for the 1997 annual NAAQS at the time of the initial revocation would have to continue to make transportation and general conformity determinations for that NAAQS until such time that they are redesignated to attainment for that NAAQS.

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[245] For the purposes of transportation conformity, a "donut" area is the geographic area outside a metropolitan planning area boundary, but inside a designated nonattainment or maintenance area boundary that includes an MPO (40 CFR 93.101).

For any area that has been redesignated to attainment for the 1997 annual $PM_{2.5}$ NAAQS (*i.e.*, a maintenance area for the 1997 annual $PM_{2.5}$ NAAQS) and is not designated nonattainment for the 2012 primary annual $PM_{2.5}$ NAAQS, the relevant planning organization will not have to make conformity determinations for any annual $PM_{2.5}$ NAAQS after the effective date of the revocation of the 1997 primary annual $PM_{2.5}$ NAAQS because, as discussed earlier, the CAA does not require maintenance areas for secondary NAAQS to make conformity determinations and the 1997 primary annual NAAQS will have been revoked. This means that, after the effective date of the revocation, areas redesignated to attainment for the 1997 annual $PM_{2.5}$ NAAQS will no longer be required to make metropolitan transportation plan, TIP, or project-level transportation conformity determinations for that NAAQS. In addition, federal agencies will no longer be required to make conformity determinations for that NAAQS. Areas that remain designated nonattainment for the 1997 annual $PM_{2.5}$ NAAQS will continue to make metropolitan transportation plan, TIP, and project-level conformity determinations for that NAAQS and federal agencies will be required to continue to make general conformity determinations for that NAAQS in these areas until such time as these areas attain that NAAQS and are redesignated to attainment (*i.e.*, until the effective of the redesignation to attainment). Table 3 shows which types of areas are required to make conformity determinations for either the 1997 or 2012 annual $PM_{2.5}$ NAAQS after the revocation of the 1997 primary annual NAAQS is effective.

TABLE 3—WHERE IS CONFORMITY REQUIRED FOR THE VARIOUS $PM_{2.5}$ NAAQS AFTER THE REVOCATION OF THE 1997 PRIMARY ANNUAL $PM_{2.5}$ NAAQS?

Attainment status	1997 Primary and secondary annual NAAQS	1997 24-Hour NAAQS	2006 24-Hour NAAQS	2012 Primary annual NAAQS
Nonattainment	X	X	X	X
Redesignated to Attainment (*i.e.*, Maintenance)		X	X	X

e. *Impact of Implementation of a New or Revised $PM_{2.5}$ NAAQS (such as the 2012 $PM_{2.5}$ NAAQS) on a State's Transportation and/or General Conformity SIP.* As long as the EPA does not make specific changes to its transportation or general conformity regulations states should not need to revise their transportation and/or general conformity SIPs. The EPA is not making any changes to its transportation conformity regulations and no transportation conformity SIP revisions are necessary. The only change that the EPA is making to its general conformity regulations is to change the *de minimis* levels in its general conformity regulations as discussed in Section IX.B.2.a of this preamble. States with a general conformity SIP should evaluate the need to revise those SIPs in light of this change. States with new nonattainment areas may also need to revise conformity SIPs in order to ensure the state regulations apply in any newly designated areas.

In the event that a nonattainment designation causes transportation conformity to apply for the first time in a state,[246] such a state is required by the statute and the EPA regulations to submit a SIP revision that addresses three specific transportation conformity requirements that address consultation procedures and written commitments to control or mitigation measures associated with conformity determinations for transportation plans, TIPs or projects. (40 CFR 51.390) Additional information and guidance can be found in the EPA's "Guidance for Developing Transportation Conformity State Implementation Plans" (*http://www3.epa.gov/otaq/stateresources/transconf/policy/420b09001.pdf*).

2. Additional General Conformity Requirements for $PM_{2.5}$ Nonattainment Areas

a. De minimis Emission Levels for Direct $PM_{2.5}$ and its Precursors. Federal actions estimated to have an annual net emissions increase less than the *de minimis* levels established in the general conformity regulations are not required to demonstrate conformity under those regulations. For direct $PM_{2.5}$ and its precursors (SO_2, NO_X, VOC and ammonia), the existing *de minimis* emission levels are set forth in the EPA's general conformity regulations at 40 CFR 93.153(b)(1). Those levels were based on the definition of a major stationary source for nonattainment NSR programs. The EPA believes it is appropriate to continue this practice for implementing the current and any future $PM_{2.5}$ NAAQS. However, because the definition of precursors currently in the general conformity regulations at 40 CFR 93.153(b)(1) does not reflect the rebuttable presumptions for certain $PM_{2.5}$ precursors, the EPA is finalizing changes to these conformity provisions to make them consistent with the agency's revised precursor requirements. Specifically, the current definition of precursors for $PM_{2.5}$ in the general conformity regulations does not reflect the rebuttable presumptions for VOC and ammonia. To address the lack of rebuttable presumptions for VOC and ammonia the EPA is revising the tables in 40 CFR 93.153(b)(1) and (2) remove "(if determined to be a significant precursor)" from the entries in the tables that apply to VOC and ammonia emissions as $PM_{2.5}$ precursors. It also does not reflect the subpart 4 definitions for "major source" and "major stationary source" that apply for Serious $PM_{2.5}$ nonattainment areas. Therefore, the EPA is finalizing changes to the $PM_{2.5}$ precursor *de minimis* levels currently in 40 CFR 93.153(b)(1) to make those levels consistent with the statutory requirements for major stationary source thresholds under subpart 4 and any relevant changes finalized in Section III of this preamble. Comments received on this proposed change were supportive. The EPA is setting the *de minimis* levels that apply to direct $PM_{2.5}$ and $PM_{2.5}$ precursors for $PM_{2.5}$ nonattainment areas for purposes of general conformity as identified in Table 4.

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[246] This is not currently the case for the areas designated for the 2012 $PM_{2.5}$ NAAQS, but the EPA is noting this in the event that future designations result in this situation.

TABLE 4—GENERAL CONFORMITY DE MINIMIS EMISSION LEVELS FOR $PM_{2.5}$ PRECURSORS

Type of emission	Tons/year in moderate $PM_{2.5}$ nonattainment areas and all maintenance areas	Tons/year in serious $PM_{2.5}$ nonattainment areas
Direct emissions	100	70
SO_2	100	70
NO_X	100	70
VOC	100	70
Ammonia	100	70

b. Implementation Considerations for the General Conformity Program. The EPA did not propose any other revisions to the general conformity regulations and is not taking any additional final actions in this rule. However, as areas develop SIPs for the 2012 and future $PM_{2.5}$ NAAQS, the agency recommends that state and local air quality agencies work with federal agencies with large facilities (*e.g.*, commercial airports, ports and large military bases) that are subject to the general conformity regulations to establish an emissions budget for those facilities in order to facilitate future conformity determinations under the conformity regulations. Such a budget could be used by federal agencies in determining conformity or identifying mitigation measures if the budget level is included and identified in the SIP.

In a few cases, tracts of land under federal management may also be included in nonattainment and maintenance area boundaries. The role of fire in these areas should be assessed and emissions budgets developed in concert with those federal land management agencies. In such areas the EPA encourages states to consider in any baseline, modeling and SIP attainment inventory used and/or submitted to include emissions expected from projects subject to general conformity, including emissions from wildland fire that may be reasonably expected in the area. Where appropriate, states may consider developing plans for addressing wildland fuels in collaboration with land managers and owners. Information is available from DOI and USDA Forest Service on the ecological role of fire and on smoke management programs and basic smoke management practices.[247]

C. Clean Data Policy

1. Summary of the Proposal

In the proposed rule, the EPA described its longstanding clean data policy and proposed to codify the policy in regulatory text. A clean data determination (CDD) is a notice-and-comment rulemaking wherein the EPA determines that a specific nonattainment area has attained the relevant NAAQS based on 3 years of quality-assured certified air quality monitoring data. The CDD suspends the state's obligation to submit to the EPA the planning elements related to attaining the standard required of nonattainment areas under the Clean Air Act for as long as the area continues to attain the standard.[248] The CDD does not suspend certain CAA requirements, such as an emissions inventory, nonattainment new source review requirements, and certain emission reduction requirements, that are considered independent of attainment needs.

The proposal provided additional discussion about attainment demonstrations, control requirements for Moderate areas, RFP and quantitative milestones, and contingency measures. With regard to control requirements for Serious areas, the proposal included two options: one option would suspend BACT/BACM requirements under a CDD if elsewhere in the rule such requirements were considered necessary for expeditious attainment, and the other option would not suspend BACT/BACM requirements if elsewhere in the rule such requirements were considered to be generally independent of attainment.

2. Final Rule

The final rule codifies the clean data policy in rules governing the implementation of current and future $PM_{2.5}$ NAAQS, and much of the guidance discussed in the proposal regarding which requirements are suspended remains the same. The EPA has already codified the clean data policy in a regulation implementing the 1997 8-hour ozone NAAQS that was specifically challenged and upheld by the D.C. Circuit in *NRDC* v. *EPA*, 571 F.3d 1245 (D.C. Cir. 2009), and numerous United States Circuit Courts of Appeal have upheld the Clean Data Policy, including the EPA's application of this interpretation of the CAA with regard to implementation of the PM_{10} NAAQS under subpart 4. *See Latino Issues Forum* v. *EPA*, Nos. 06–75831 and 08–71238 (9th Cir. March 2, 2009) (memorandum opinion). The EPA had also codified the clean data policy for $PM_{2.5}$ in the now remanded 2007 $PM_{2.5}$ implementation rule. For a complete discussion of the Clean Data Policy's history and EPA's longstanding interpretation under the Clean Air Act, please refer to the proposal.

The planning elements under subpart 1 and subpart 4 generally include reasonable further progress (RFP) requirements, attainment demonstrations, RACM and RACT, nonattainment area contingency measures, and other state planning requirements related to attaining the NAAQS.[249] The suspension of the obligation to submit such requirements applies regardless of when the plan submissions are due. The CDD does not suspend CAA requirements that are independent of helping the area achieve attainment, such as the requirements to submit an emissions inventory and nonattainment new source review requirements. The determination of attainment is not equivalent to a redesignation, and the state must still meet the statutory requirements for redesignation in order to be redesignated to attainment. A determination of attainment for purposes of the Clean Data Policy/regulations is also not linked to any particular attainment deadline, and is not necessarily equivalent to a determination that an area has attained the standard by its applicable attainment deadline, *e.g.,* under CAA section 188(b). Note also that if the EPA determines that an area with a clean data determination subsequently is violating the standard prior to being redesignated to attainment, the area will be required to address the pertinent requirements when it submits the SIP to EPA. As has long been the EPA's policy, areas subject to a determination that a CDD is rescinded due to subsequent violation of the NAAQS would receive a reasonable amount of time to address the previously suspended requirements and submit revisions to their SIPs. The EPA would establish this SIP submittal date on a case-by-case basis, taking into account individual circumstances surrounding the particular SIP provisions at issue.[250]

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[247] USDA Forest Service and Natural Resources Conservation Service, Basic Smoke Management Practices Tech Note, October 2011, *http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046311.pdf*.

[248] In the context of CDDs, the EPA distinguishes between attainment planning requirements of the CAA, which relate to the attainment demonstration for an area and related control measures designed to bring an area into attainment for the given NAAQS as expeditiously as practicable, and other types of requirements, such as permitting requirements under the NNSR program, and any specific control requirements independent of those strictly needed to ensure timely attainment of the given NAAQS.

[249] *See* December 14, 2004 memorandum from Stephen D. Page, Director, EPA Office of Air Quality Planning and Standards, to Air Division Directors, EPA Regions I–X, titled "Clean Data Policy for the Fine Particle National Ambient Air Quality Standards." Available at: *http://www.epa.gov/airquality/urbanair/sipstatus/docs/pm25_clean_data_policy_14dec2004.pdf*.

This rule specifies that a determination that a nonattainment area is attaining the current and future $PM_{2.5}$ NAAQS would suspend the following attainment planning related requirements under subpart 1 and subpart 4: (i) The part D, subpart 4 and subpart 1 obligation to provide an attainment demonstration pursuant to CAA section 189(a)(1)(B); (ii) the RACM and RACT provisions of CAA section 189(a)(1)(C); (iii) the RFP and quantitative milestones provisions of CAA section 189(c); and, (iv) related attainment demonstration, RACM and RACT, RFP and contingency measure provisions requirements of subpart 1, section 172. The following sections a–d provide additional detail on the $PM_{2.5}$ NAAQS planning requirements that would be suspended by a CDD.

a. Attainment Demonstrations. With respect to the attainment demonstration requirements of section 172(c) and section 189(a)(1)(B) of the CAA, the EPA finds that if an area already has air quality monitoring data demonstrating attainment of the standard, there is no need for an area to make a further submission containing additional measures to achieve attainment, nor is there a need for the area to perform future modeling to show how the area will achieve attainment. The plain language of CAA section 189(a)(1)(B) requires that the attainment plan provide for "a demonstration (including air quality modeling) that the [SIP] will provide for attainment by the applicable attainment date." Where the area has attained the standard, such a demonstration no longer serves a purpose.

b. Control Measure Requirements for Moderate Areas. Both CAA sections 172(c)(1) and 189(a)(1)(C) require "provisions to assure that reasonably available control measures" (*i.e.,* RACM) are implemented in a nonattainment area. Reasonably available control technology (*i.e.,* RACT) is a subset of RACM. The EPA has long interpreted "reasonably available control measures" under CAA sections 172(c)(1) and 189(a)(1)(C) to mean only those measures that are necessary to help an area achieve attainment. Thus, where an area is already attaining the standard, no additional RACM are required, but all measures adopted into the SIP prior to attainment would remain. The EPA is interpreting CAA section 189(a)(1)(C) consistent with its interpretation of CAA section 172(c)(1).

c. RFP and Quantitative Milestones. The EPA has long interpreted the provisions of part D, subpart 1 of the CAA (sections 171 and 172) as not requiring the submission of RFP for an area already attaining the PM_{10} NAAQS. For an area that is attaining, showing that the state will make RFP towards attainment "will, therefore, have no meaning at that point."

d. Contingency Measures. Other SIP submission requirements are linked with these attainment demonstration and RFP requirements, and similar reasoning applies to them. These requirements include the contingency measure requirements of CAA sections 172(c)(9). The EPA has interpreted the obligation to submit contingency measure requirements of CAA sections 172(c)(9) as suspended when an area has attained the standard because those "contingency measures are directed at ensuring RFP and attainment by the applicable date." 57 FR at 13564; *see* also Seitz memo at pgs. 5–6.

e. Control Measure Requirements for Serious Areas. Section VII.D of the preamble explains the rationale of the EPA's decision to maintain its longstanding policy of considering the BACT/BACM requirement of CAA section 189(b)(1)(B) to be generally independent of attainment. Accordingly, this rule states that a clean data determination would not suspend the obligation for the state to submit any applicable outstanding BACM and BACT requirements.

For a Serious area that failed to attain the relevant $PM_{2.5}$ NAAQS by the applicable attainment date and that is therefore subject to the annual 5 percent emissions reduction requirement under CAA section 189(d), but is nevertheless now attaining the relevant NAAQS, the EPA believes that the Clean Data Policy may apply to the obligations of the state to make an attainment plan submission to meet the requirements of CAA section 189(d). Once such an area is attaining the relevant NAAQS, a clean data determination would suspend the CAA section 189(d) submission requirement.

3. Comments and Responses

Comment: Several commenters supported the EPA's proposal to codify the clean data policy in the final rule because they believe the policy is lawful and relieves states from unnecessary planning burdens in areas where the NAAQS is met. Some commenters stated the policy has specifically been upheld by the D.C. Circuit in the context of review of nationally applicable implementation rules for the EPA's ozone NAAQS [*Natural Res. Def. Council* v. *EPA,* 571 F.3d 1245, 1260–61 (D.C. Cir. 2009)]. Other commenters, however, asserted that they "reiterate their previous comments regarding the illegality of the Clean Data Policy." To the extent that the Agency planned to continue to follow the policy, these commenters agreed with the EPA's interpretation that only those requirements tied to an area's demonstration of attainment should be suspended. To that end, the commenters requested clarification that measures that have been responsible for the area's attainment must be submitted and approved into the SIP even following a Clean Data Determination. Similarly, other commenters requested clarification as to EPA's statement that "Thus, where an area is already attaining the standard, no additional RACM are required, but all measures adopted into the SIP prior to attainment would remain." The commenter wondered if "all measures adopted into the SIP" includes measures that were included and identified as RACT or RACM in the original SIP, even if those measures have not yet been submitted to EPA in regulatory form.

Finally, some commenters noted that the Act requires that RACM/RACT be implemented within 4 years of a nonattainment designation and stated that, as sources reduce emissions of $PM_{2.5}$ and regional PM precursors due to national rules yet to be fully implemented (*e.g.*, Boiler NESHAPS, CSAPR) it is entirely possible that an area may attain the standard prior to complete implementation of RACM/RACT. The commenters stated that, if an area attains the NAAQS prior to implementation of the planning requirements, it is meaningless and overly burdensome to require the area to continue implementing RACM/RACT.

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[250] *Ibid.*

Response: The EPA disagrees with commenters who allege, without explanation, that the Clean Data Policy is "illegal." Rather, as noted by supportive commenters, the EPA has long interpreted certain CAA requirements that are designed to bring an area into attainment to serve no purpose once an area is attaining, and thus has interpreted the Act as permitting the Agency to suspend the requirements to submit revisions to the SIP addressing those requirements. This position has been upheld by multiple Circuit Courts of Appeals.[251]

In response to the requests for clarification of which RACM requirements are suspended by a CDD, we note that, for over 30 years, the EPA has consistently interpreted the RACM requirement in CAA section 172(c)(1) to apply only to those measures that, individually or collectively, contribute to expeditious attainment of the NAAQS. The suspension of the statutory requirement to submit RACM is premised on the idea that, "[t]o the extent an area is already achieving attainment as expeditiously as possible, imposition of additional control [measures] would not hasten achievement of the NAAQS. In such a situation, the EPA may reasonably conclude that no control [measures] are reasonably available and the area need not implement further [measures] to satisfy the [RACM] requirement." *See NRDC* v. *EPA,* 571 F.3d 1245, 1253 (D.C. Cir. 2009). Thus, upon the EPA's finalization of a CDD for a particular NAAQS, the EPA formally suspends the obligation to submit attainment-related plan elements for that particular NAAQS, including RACM. A CDD does not, however, affect the criteria in CAA section 107(d)(3)(E) for redesignation to attainment, including the requirement for the state to demonstrate to the EPA's satisfaction that the improvement in air quality is due to "permanent and enforceable reductions in emissions resulting from implementation of the applicable implementation plan" and other permanent and enforceable reductions. Thus, to the extent certain state/local control measures were necessary to an area's attainment of the NAAQS, the state may need to submit those measures to the EPA for SIP approval in order to meet the statutory criteria for redesignation in CAA section 107(d)(3)I, notwithstanding the suspension of planning obligations under a CDD.

In this case, it is not clear to the EPA what the commenter means by the phrase "original SIP," since the SIP is only those measures that have been submitted and approved by the EPA. To the extent that a measure was adopted into the SIP prior to an area's attainment of the NAAQS, and therefore contributed to an area's attainment, that measure is therefore required to remain as part of the SIP. We infer that the comment might be referring to commitments that were approved into a SIP to adopt future measures, or that commenters might be asking for clarification regarding measures that have been adopted locally or at a state level prior to the area's coming into attainment but have not yet been submitted to the EPA for approval into the federally-approved SIP. As explained above, a CDD has no effect on the state's obligation to demonstrate that an area's improvement in air quality is due to "permanent and enforceable" emissions reductions in order to meet the statutory requirements for redesignation to attainment in CAA section 107(d)(3)(E). Additionally, a CDD does not alter the effect of any measure (including any state commitment) that has *already* been approved into a SIP, even if that measure is a commitment to adopt or submit a future measure. Once approved into a SIP, such a measure becomes an enforceable emission standard or limitation subject to EPA or citizen enforcement under CAA section 304, which cannot be altered except through a SIP revision approved by the EPA. Along those same lines, even if an area has adopted into its SIP RACM/RACT but has yet to fully implement those measures when the area first starts attaining the NAAQS, a CDD does not excuse the area from continuing to implement its SIP requirements, *i.e.,* the RACM/RACT measures that have been approved into the SIP. The CDD merely suspends the requirement to *submit* RACM/RACT, that is, additional measures on top of what brought the area into attainment; a state may only stop implementing those measures already in its SIP through a SIP revision approved by the EPA.

Comment: Some commenters supported the EPA's proposal to retain the BACM/BACT submission requirement even with a CDD (80 FR 15444). Other commenters, however, stated that, once the EPA makes an attainment determination, the EPA should suspend the requirements to submit BACM/BACT and that to do otherwise is illogical.

Response: The EPA is finalizing the option that requires BACM/BACT to be submitted even if the EPA has issued a CDD for an area. As discussed in our proposal and earlier in this section, the legal underpinning of the Clean Data Policy is that the EPA interprets the CAA not to require the submission of requirements that are designed to get an area to attainment once that area is already attaining the NAAQS. Thus, only those "attainment planning" requirements are suspended by a CDD. It is therefore illogical for the EPA to extend the Clean Data Policy to the submission of the BACM/BACT requirement for Serious Areas. Because the EPA interprets BACM/BACT as independent of attainment, as discussed above in Section VII.D of the preamble, the requirement to submit BACM/BACT continues to apply regardless of whether the EPA has determined that the area is attaining.

D. CAA Section 179B/International Border Areas

1. Specific Requirements

a. Summary of Proposal. Section 179B of the CAA, titled "International Border Areas," applies to areas that would attain the relevant NAAQS by the statutory attainment date "but for" emissions emanating from outside the U.S. Under CAA section 179B, if applicable, the provision modifies subpart 4 attainment plan obligations applicable to areas designated nonattainment for any PM NAAQS. The EPA proposed and sought comment on two approaches that would give greater clarity to the agency's existing interpretation of the RACM/RACT and additional reasonable measure requirements for Moderate area attainment plans to be approved under CAA section 179B. The first proposed interpretation would have clarified that the control strategy for an area that could attain by the Moderate area attainment date, "but for" foreign emissions of direct $PM_{2.5}$ or its precursors, must include all control measures identified by the state to be technologically and economically feasible and implementable on sources in the area by the end of the sixth calendar year following designation of the area. Under this approach, inclusion of such measures would satisfy requirements for RACM and RACT (for measures that can be implemented within four years) and additional reasonable measures (for measures than can be implemented within six years but not within four). The proposal also sought comment on a possible exception for any such measures that collectively would not be effective in reducing ambient $PM_{2.5}$ levels in the area. The second proposed approach would have required a state to demonstrate that its selected control measures for a Moderate nonattainment area would achieve reductions in $PM_{2.5}$ levels that exceeded the applicable NAAQS in proportion to their contribution to overall $PM_{2.5}$ levels. Inclusion of these proportional measures would thus satisfy RACM/RACT and additional reasonable measures under the second approach. The EPA sought comment on these two approaches to clarify what constitutes a reasonable control strategy in the context of a SIP submitted pursuant to CAA section 179B.

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[251] *See, e.g., NRDC* v. *EPA,* 571 F.3d 1245 (D.C. Cir. 2009); *Sierra Club* v. *EPA,* 99 F.3d 1551 (10th Cir. 1996); *Latino Issues Forum* v. *EPA,* Nos. 06–75831 and 08–71238 (9th Cir. March 2, 2009) (memorandum opinion).

The EPA also proposed that any Moderate area attainment plan submitted under CAA section 179B must include an RFP plan with required air quality targets consistent with the RFP Option 2. In addition, the EPA proposed requirements for establishing and reporting on quantitative milestones for areas with approved "but for" demonstrations.

b. Final Rule

Section 179B(a) of the CAA provides that the EPA shall approve an attainment plan for a nonattainment area that is an international border area if: (i) the attainment plan meets all other applicable requirements of the CAA, and (ii) the submitting state can demonstrate satisfactorily that "but for emissions emanating from outside of the United States," the area would attain and maintain the relevant NAAQS. In addition, CAA section 179B(d) provides that if a state demonstrates that an area would have attained the NAAQS but for emissions emanating from outside the U.S., then the area is not subject to the mandatory reclassification element of CAA section 188(b)(2) for Moderate areas that fail to attain by the applicable attainment date.

Under CAA section 179B, areas affected by emissions from outside the U.S. continue to have attainment plan obligations. First, even if the area is impacted by emissions from outside the U.S., that fact does not affect the designation of the area. Such an area that is violating the relevant NAAQS will be designated nonattainment even if emissions from outside the U.S. contribute to that violation. Second, as a result of that designation, the state is required to meet the applicable attainment plan requirements for the relevant NAAQS. Section 179B of the CAA does not negate the attainment plan requirements. Rather, it allows the EPA to approve an attainment plan that demonstrates attainment and maintenance of the NAAQS "but for" international emissions.

The EPA has determined that under the best reading of CAA section 179B, states remain obligated to meet the attainment plan requirements other than the requirement to demonstrate attainment and maintenance of the relevant NAAQS. This determination is based upon the fact that 179B(a)(1) explicitly states that such an attainment plan must meet all the requirements of the CAA with that exception. The applicable requirements for an attainment plan for $PM_{2.5}$ include those requirements that apply to a Moderate area attainment plan. Those requirements include an emissions inventory, RACM and RACT, additional reasonable measures, RFP, quantitative milestones, contingency measures, NNSR and motor vehicle emissions budgets for transportation conformity purposes. The Addendum includes a discussion of the applicable attainment plan requirements in the context of developing a SIP subject to CAA section 179B. In it, the EPA clarified that "RACM/RACT must be implemented to the extent necessary to demonstrate attainment by the applicable attainment date if emissions emanating from outside the U.S. were not included in the analysis."[252] The EPA further encouraged states "to reduce emissions beyond the minimum necessary to satisfy the 'but for' test in order to reduce the PM concentrations to which their populations are exposed."[253] However, the EPA acknowledged that "if . . . States . . . were also required, because of contributions to PM_{10} violations caused by foreign emissions, to shoulder more of a regulatory and economic burden than States not similarly affected. . .such a requirement would unfairly penalize States containing international border areas and effectively undermine the purpose of CAA section 179B. Indeed, to the extent an affected State can satisfactorily demonstrate that implementation of such measures clearly would not have advanced the attainment date, the EPA could conclude they are unreasonable and hence do not constitute RACM."[254]

In the proposal, the EPA specifically took comment on the most appropriate way to address the RACM and RACT requirements. The past interpretation of RACM and RACT requirements in the context of CAA section 179B was considered when the agency proposed an option to allow a state not to adopt such measures if the state could demonstrate that collectively the measures will not be effective in reducing $PM_{2.5}$ levels in the area. Some commenters supported this exception, stating that it would prevent wasting resources on ineffective measures. Some commenters stated that requiring implementation of all RACM/RACT and additional reasonable measures circumvents Congressional intent and the CAA. Other commenters disagreed, stating that these areas should implement all measures due to the importance to public health.

Regarding RACM/RACT and additional reasonable measures, the EPA reviewed the comments received and its past interpretation of RACM and RACT requirements in the context of CAA section 179B attainment plans for $PM_{2.5}$ NAAQS. The EPA is persuaded that this approach is most appropriate and most consistent with the Act and with the control requirements for other Moderate areas that demonstrate they cannot practicably attain by the Moderate area attainment date. *See* section 51.1009(a)(4)(ii). In longstanding guidance the EPA has encouraged states "to reduce emissions beyond the minimum necessary to satisfy the 'but for' test in order to reduce the PM_{10} concentrations to which their populations are exposed."[255] Given that the primary purpose of an attainment plan is to ensure expeditious attainment of the NAAQS and protection of public health and welfare through implementation of control measures that achieve emissions reductions, adopting an interpretation that would allow for continued emissions of pollutants that the state could reasonably reduce would be antithetical to the objectives of the CAA. Just as it is appropriate and consistent with the Act to adopt reasonable measures (*i.e.,* RACT/RACM or additional reasonable measures) in areas that cannot practicably attain by the attainment date, as previously discussed, it is also appropriate and consistent with the Act to adopt reasonable measures in areas that cannot attain due to international emissions.

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[252] Addendum to the General Preamble, 59 FR 41998 (August 16, 1994), at page 42001.

[253] *Ibid.*

[254] *Ibid.*

[255] *Ibid.*

Therefore, the EPA requires that Moderate area attainment plans approved under CAA section 179B must implement all technologically and economically feasible measures that can be implemented on sources in the area by the end of the sixth calendar year following designation of the area (*i.e.*, RACM and RACT and additional reasonable measures). This requirement is intended to ensure that the area makes reasonable progress toward attaining the standard even if such measures are not expected to yield attainment by the statutory Moderate area attainment date. This approach parallels the requirements described in Section IV.D in this preamble, pursuant to CAA section 189(a)(1), for Moderate $PM_{2.5}$ nonattainment areas that cannot practicably attain the NAAQS by the latest statutory attainment date for the area. Requiring the implementation of all reasonable measures is even more important in the context of a Moderate area for which CAA section 179B applies because sources in such areas will not be subject to the more stringent BACM/BACT, MSM, or 5 percent requirement because such areas are not subject to mandatory reclassification as Serious areas pursuant to CAA section 179B(d). Thus, the only level of $PM_{2.5}$ control requirements that will likely ever apply to these sources is the less-stringent RACM/RACT and additional reasonable measures level of control; therefore, all the sources in the area should reduce emissions if such reduction is reasonable since the public in those areas will continue to be subject to ambient levels of emissions that the agency has determined are unsafe notwithstanding implementation of those reasonable measures. Additionally, the EPA notes that the process to determine RACM already allows states to identify the subset of all control measures that are technologically and economically feasible, which should be adequate to prevent significant wasting of resources on ineffective measures.

The EPA has determined that it will not finalize the proposed option of achieving reductions in $PM_{2.5}$ levels in proportion to the area's contribution to overall $PM_{2.5}$ levels. The EPA received several comments on the proposed option to allow states to implement control measures for a Moderate nonattainment area with a plan approved under CAA section 179B that would achieve reductions in $PM_{2.5}$ levels in proportion to the area's contribution to overall $PM_{2.5}$ levels. Although some commenters supported the possibility of proportionally implementing control measures, other commenters raised possible negative consequences of this option. Commenters highlighted the difficulty that states would face in apportioning responsibility for emissions between foreign and non-foreign sources, which would be necessary under the proportional approach. These commenters also disagreed as to whether the EPA or states should be responsible to determine the proportional allocation of international emissions. The EPA is also concerned that a proportional approach would introduce too much complexity into an already complex analytical process. Additionally, the EPA notes that no other NAAQS pollutant offers a proportional approach to implementation of control measures and is not convinced that there are sufficient reasons to finalize this approach for $PM_{2.5}$ nonattainment areas.

Section 179B(d) of the CAA states that any area for which the state establishes to the EPA's satisfaction that the area "would have attained the NAAQS by the applicable attainment date, but for emissions emanating from outside the United States, shall not be subject to the provisions of section [188(b)(2)]." CAA section 188(b)(2) requires the EPA to determine, within 6 months following the applicable attainment date for a Moderate $PM_{2.5}$ nonattainment area, whether the area attained the NAAQS by that date and to reclassify the area as Serious if it is not in attainment after the applicable attainment date. For any Serious area subject to an EPA determination of failure to attain by the Serious area attainment date, CAA section 189(d) requires the state to submit plan revisions which provide for attainment of the $PM_{2.5}$ NAAQS and for annual emissions reductions of not less than 5 percent until the area attains. These planning requirements in section 189(d) apply only upon the EPA's determination that a Serious area has failed to attain the applicable NAAQS by the Serious area attainment date. Because section 179B(d) explicitly provides that any area that satisfies the "but for" attainment test in CAA section 179B shall not be subject to the provisions for reclassification to Serious upon failure to attain in CAA section 188(b)(2), the consequences for failure to attain by the Serious area attainment date in section 189(d) generally do not apply to such areas.

In the event that the EPA has already reclassified an international border area as Serious, when the state submits a "but for" demonstration under section 179B, all of the Serious area requirements that apply to the area (*e.g.*, the requirements to implement BACM/BACT and additional feasible measures) would remain in effect. This is because at the time the state submits the "but for" demonstration, these statutory requirements already apply. Upon the EPA's approval of a Serious area plan and section 179B demonstration for such an area, however, the EPA would no longer be obligated to make a determination of failure to attain by the Serious area attainment date triggering the additional planning requirements of section 189(d). Consistent with Congress's clear intent in section 179B(d) to relieve Moderate $PM_{2.5}$ nonattainment areas that satisfy the "but for" attainment test of the additional planning obligations that result from a mandatory determination of failure to attain by the Moderate area attainment date, the EPA interprets section 179B as also relieving Serious $PM_{2.5}$ nonattainment areas of the additional planning obligations in section 189(d) that result from a mandatory determination of failure to attain by the Serious area attainment date, once the EPA approves the state's Serious area plan and section 179B demonstration.

Where a Serious area fails to attain by the Serious area attainment date and is therefore subject to the requirements of section 189(d), the EPA's approval of a section 189(d) plan and 179B demonstration would mean that the EPA is no longer obligated to make further determinations of failure to attain or to trigger additional planning requirements. The EPA intends to review each SIP submission containing a "but for" attainment demonstration for an international border area for compliance with the requirements of section 179B.

The EPA notes that, with one exception for contingency measures, the final rule provisions governing for the RFP, quantitative milestone, and contingency measure requirements for $PM_{2.5}$ nonattainment areas are the same for areas seeking plan approval under CAA section 179B as they are for any other area. For example, the EPA requires that as part of any Moderate area attainment plan submitted under CAA section 179B, a state must include an RFP plan developed consistent with the process described in Section IV.F of this preamble as a Moderate nonattainment area that cannot practicably attain the relevant NAAQS by the statutory attainment date. In addition, the EPA requires that the state must identify quantitative milestones for the area to be achieved 4.5 years and

7.5 years from the date of designation of the area. The EPA will apply the same requirements for establishing and reporting on quantitative milestones for Moderate nonattainment areas with an approved "but for" demonstration under CAA section 179B as for all other Moderate nonattainment areas, as described in Section IV.G of this preamble. Furthermore, the state must include as part of any attainment plan submission made for such an area contingency measures that are ready to be implemented quickly and with minimal further action by the state or by the EPA in the event the EPA determines that such area failed to meet RFP or quantitative milestone requirements. The contingency measures should achieve approximately 1 year's worth of emissions reductions as calculated by the state for purposes of the RFP analysis. The exception to the contingency measure requirement for areas with approved CAA section 179B demonstrations is that contingency measures for failure to attain are not required in such plans, because under CAA section 179B(d) the EPA is not required to make determinations concerning attainment for such areas. Further explanation of contingency measures can be found in Section IV.H of this preamble.

Regarding the "but for" demonstrations under CAA section 179B, the EPA has historically evaluated these demonstrations on a case-by-case basis, based on the individual circumstances and data provided by the submitting state. These demonstrations have included information such as ambient air quality monitoring data, modeling scenarios, emissions inventory data and meteorological or satellite data.[256] The Moderate area attainment demonstration modeling and other elements of the attainment demonstration must show attainment and maintenance of the NAAQS but for the emissions from outside of the U.S. However, CAA section 179B does not provide authority to exclude monitoring data influenced by international transport from regulatory determinations related to attainment and nonattainment.

Where international transport of emissions contributes to an exceedance or violation, such data may be excluded from consideration only if they were significantly influenced by exceptional events under section 319(b) of the CAA. If the data meet the criteria contained in the EPA's Exceptional Events Rule, the exceedance can be addressed by that rule.[257] Specifically, if the EPA concurs with a state's request to exclude affected data, the event-influenced data are officially noted and removed from the data set used to calculate official design values, which may be used as part of a regulatory determination.

The EPA expects that the best approach for evaluating the potential impacts of international transport on nonattainment is for states to work with the EPA on a case-by-case basis to determine the most appropriate information and analytical methods for each area's unique situation. The EPA will work with states that are developing exceptional events demonstrations and attainment plans for which CAA section 179B is relevant, and ensure the states have the benefit of the EPA's understanding of international transport of $PM_{2.5}$ and $PM_{2.5}$ precursors.

c. Comments and Responses

Comment: Commenters stated the EPA should not require the state to implement a section 189(d) 5 percent reduction plan, since attaining such reductions may well be impossible if there are significant international emissions.

Response: The EPA agrees that as long as the affected nonattainment area satisfactorily meets the provisions of CAA section 179B, that area should not be subjected to the additional requirements of CAA section 189(d) even if the area fails to attain.

Comment: Commenters stated that requiring implementation of all RACM and RACT for CAA section 179B nonattainment areas would penalize rural communities and would run counter to the intent of CAA section 179B of providing regulatory relief to areas affected by foreign emissions.

Response: For the reasons stated earlier, the EPA has determined that section 179B nonattainment areas should be required to implement control measures to the same extent as a Moderate nonattainment area that demonstrates it will not be able to attain the $PM_{2.5}$ NAAQS by the statutory attainment date.

Comment: Some commenters stated that the EPA's current interpretation of section 179B and the agency's guidance which encourages states "to reduce emissions beyond the minimum necessary to satisfy the 'but for' test," circumvents Congressional intent and the CAA and establishes a second ambient air quality threshold not related to the NAAQS.

Response: The EPA disagrees that encouraging states to minimize emissions as much as possible to protect public health circumvents Congressional intent. The EPA has determined that the reasonable control measure requirements outlined in section 51.1009(a)(4)(ii) represent the most appropriate interpretation of the CAA in line with the overriding Congressional intent to protect and improve air quality thereby enabling the associated public health benefit.

Comment: Some commenters stated that if an area's demonstration is approved under CAA section 179B, any contingency measures should only be required to obtain emissions reductions in proportion to the contribution of emissions excluding the international pollution, or at least to the contribution of emissions reductions that the state can feasibly attain.

Response: The EPA agrees that contingency measures relate to the domestic portion of emissions affecting the nonattainment area. The state will not be required to develop contingency measures to make up for those emissions coming from international sources. The EPA emphasizes that contingency measures for a section 179B area will be for failure to meet RFP requirements, not for failure to attain.

However, the EPA expects states with a section 179B area to follow the guidance and requirements outlined in Section IV.H of this preamble to identify contingency measures that can provide emissions reductions from sources within the state's jurisdiction. As discussed in Section IV.H of the preamble, this should include an explanation of the amount of anticipated emissions reductions to be accomplished by the contingency measures. If such an area is unable to identify approximately 1 year's worth of emissions reductions to constitute contingency measures, the explanation should describe the factors considered by the state when reaching this conclusion.

E. Enforcement and Compliance

a. Summary of Proposal. The agency proposed that in general, in order for a SIP regulation to be enforceable, it must clearly spell out which sources or source types are subject to its requirements and what its requirements (*e.g.*, emission limits or work practices) are. The EPA proposed that an enforceable regulation would also specify the timeframes within which these requirements must be met, and definitively state the recordkeeping and monitoring requirements appropriate to the type of sources being regulated. Additionally, the EPA proposed that an enforceable regulation would also contain test procedures in order to determine whether sources are in compliance.

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[256] *Ibid.* The Addendum includes further examples of information a state may present for the EPA to consider as part of the "but for" demonstration, including additional monitors in international border areas, more detailed emissions inventories, and speciation data that identifies $PM_{2.5}$ components from foreign sources.

[257] *See* 40 CFR 40 CFR 50.1, 50.14 and 51.930.

b. Final Rule. Section 172(c)(6) in subpart 1 of the CAA requires nonattainment SIPs to "include enforceable emission limitations, and such other control measures, means or techniques . . . as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for attainment." In the remanded 2007 $PM_{2.5}$ Implementation Rule, the EPA described the general elements that characterize an enforceable SIP regulation, recognizing that enforceable SIP regulations may address the elements in different ways depending on the type of source category being regulated. The agency continues to believe and hereby finalizes that in general, in order for a SIP regulation to be enforceable, it must clearly spell out which sources or source types are subject to its requirements and what its requirements (*e.g.,* emission limits or work practices) are. An enforceable regulation would also specify the timeframes within which these requirements must be met, and definitively state the recordkeeping and monitoring requirements appropriate to the type of sources being regulated. The recordkeeping and monitoring requirements would have to be sufficient to enable the state or the EPA to determine whether the source is complying with the emission limit on a continuous basis. An enforceable regulation would also contain test procedures in order to determine whether sources are in compliance.

The EPA continues to believe that complete and effective regulations that ensure compliance with an applicable emissions limit must include requirements for both performance testing of emissions and ongoing monitoring of the compliance performance of control measures, and the agency requires that SIP regulations that establish emission limits include the following for performance testing:

(1) Indicator(s) of compliance—the pollutant or pollutants of interest (*e.g.,* filterable and condensable $PM_{2.5}$) and the applicable units of measurement for expressing compliance (*e.g.,* ng/J of heat input, lb/hr);

(2) Test method—reference to a specific EPA or other published set of sample collection and analytical procedures, equipment design and performance criteria, and the calculations providing data in units of the indicator of compliance (Section IX.K of this preamble presents a discussion of specific test methods for condensable $PM_{2.5}$ emissions);

(3) Sample collection characteristics—conditions related to the sample collection portion of the performance test. Such conditions would include duration of sampling period, either on a time or volume collected basis; the number of runs comprising a test (*e.g.,* three runs per test); and the averaging period, *i.e.,* the time over which the emissions limit is averaged (*e.g.,* 8 hours); and,

(4) Frequency—the time between emissions or performance tests (*e.g.,* within 30 days of facility start-up and once each successive quarter, every 6-month period, or yearly).

In order to be complete with regard to compliance monitoring provisions, the EPA requires that regulations adopted into the SIP must include the following critical elements:

(1) Indicator(s) of performance—the parameter or parameters measured or observed for demonstrating proper operation of the pollution control measure or compliance with the applicable emissions limitation or standard. Indicators of performance could include direct or predicted emissions measurements, process or control device (and capture system) operational parametric values that correspond to compliance with efficiency or emissions limits, and recorded findings of verification of work practice activities, raw material or fuel pollutant content, or design characteristics. Indicators could be expressed as a single maximum or minimum value, a function of process variables (*e.g.,* within a range of pressure drops), a particular operational or work practice status (*e.g.,* a damper position, completion of a waste recovery task), raw material or fuel pollutant content, or an interdependency between two or more variables;

(2) Measurement technique—the means used to gather and record information of or about the indicators of performance. The components of the measurement technique include the detector type or analytical method, location and installation specifications, inspection procedures, and quality assurance and quality control measures. Examples of measurement approaches include continuous emissions monitoring systems (CEMS), continuous opacity monitoring systems (COMS), continuous parametric monitoring systems (CPMS), performance testing, vendor or laboratory analytical data, and manual inspections and data collection that include making records of process conditions, raw materials or fuel specifications, or work practices. Directly enforceable emission measurements, such as PM CEMS, are preferred wherever feasible. Where COMS are feasible, it should be clear that opacity is a directly enforceable standard, not merely an indicator of compliance;

(3) Averaging time—the period over which to average data to verify compliance with the emissions limitation or standard or proper operation of the pollution control measure. Examples of averaging time include a 3-hour average in units of the emissions limitation, a 30-day rolling average emissions value, a daily average of a control device operational parametric range, periodic (*e.g.,* monthly, annual) average of raw materials or fuel pollutant content, and an instantaneous alarm;

(4) Monitoring frequency—the number of monitoring data values recorded over a specified time interval. Examples of monitoring frequencies include at least one data value every 15 minutes for CEMS or CPMS, at least every 10 seconds for COMS, upon receipt or application of raw materials or fuel to the process, or at least once per operating day (or week, month, etc.) for performance testing, work practice verification, or equipment design inspections; and,

(5) Reporting and record retention requirements—criteria for retaining monitoring and test data in an electronic form and periodic electronic reporting of information as needed to the compliance office. Electronic record retention and submission have been widely adopted, and the EPA believes that such readily accessible documentation could be used by state, federal and other analysts to spot trends and non-compliance more easily than if these entities conducted reviews of paper documents. The EPA also recommends that compliance reports be made available online so that the general public can readily access the information without the need to submit Freedom of Information Act (FOIA) requests to the EPA. The EPA is in the process of revising federal rules to make similar requirements apply.

The EPA acknowledges that one way for regulatory authorities to have owners or operators of regulated sources demonstrate compliance via ongoing monitoring is to use a Compliance Assurance Monitoring (CAM) rule-type approach.[258] Under such an approach, an owner or operator would be able to establish operating ranges of continuously monitored parameters determined through concurrent performance testing as indicators of performance. A CAM rule-type approach would require owners or operators who chose parameter monitoring as indicative of compliance to immediately take corrective action should a measured parameter value occur outside the demonstrated range associated with compliance. Moreover, concurrent performance testing and parameter measurement would be necessary on a periodic basis, generally annually, and may be necessary on a more frequent basis to reverify or reset parameter value range, particularly when the operating range is exceeded. Failure of the owner or operator to take immediate corrective action would constitute a violation of the applicable rule. Moreover, failure of a parameter range to demonstrate compliance when reverification or resetting performance testing occurred would also constitute a violation of the emission limit. This implementation rule does not prohibit states from taking a CAM rule type approach and making parameters directly enforceable limits.

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[258] *See* the CAM rule, available at 40 CFR part 64.

The EPA continues to believe that approval of regulations adopted into SIPs should ensure that these critical elements are present and clearly defined to be approvable. In particular, the compliance obligations, including emissions limits and other applicable requirements, should be representative of and accountable to the assumptions used in a state's attainment demonstration. This accountability should include the ability to transfer the applicable regulatory requirements to a title V operating permit subject to the EPA and public review.[259]

c. Comments and Responses

Comment: Commenters suggested that the proposal's use of the term "indicators of compliance" is confusing and suggested the EPA should simply express that emission limitations must identify the pollutant of interest and the units of measurement. The commenters suggested the EPA use the term "measurement method" and the EPA acknowledge that sources may use procedures that are not published by the EPA, especially for pollutants for which there is no federally promulgated test method, performance specification, or voluntary consensus standard. The commenters disagreed that "averaging time" is always the appropriate term, since it has no applicability for standards that use test methods that specify minimum run times or sample volumes, and numbers of runs, and suggested the EPA use the term "sample time or volume" and make clear that it can be a minimum or an absolute value.

Response: The EPA does not agree with the commenters' suggestion. The proposal identified four components associated with demonstrating compliance via performance testing—the indicator of compliance (for which the commenters expressed concern), the test method, the averaging time associated with the test method, and the frequency of conducting the test—as well as five components associated with demonstrating compliance via ongoing monitoring. However, the commenters appear to suggest to expand compliance demonstration techniques beyond testing and monitoring. To the extent that SIP regulations are developed that do not rely on performance testing or ongoing monitoring as means for demonstrating compliance, the EPA agrees that other components, including emission limitations that identify the pollutant of interest and units of measurement, as suggested by the commenter, would be appropriate.

The EPA believes neither a change in term from "test method" to "measurement method" nor an additional acknowledgement regarding its current wording "specific EPA or other published set of [criteria]" is needed. The component to which the commenter refers is based on performance testing; ongoing measurement components are covered as 'measurement technique' in one of the five critical elements for ongoing measurement.

The EPA agrees with the commenters that in some circumstances, test methods rely on sample volumes as opposed to specific durations. The 'averaging time' component of performance tests will be changed to 'sample collection characteristics', where such characteristics will include averaging time, duration, or sample volume and number of runs, as applicable. While the EPA does not believe it to be necessary to identify that the sample collection characteristics could be minima, maxima, or ranges, the preamble discussion associated with this change indicates that specific test methods, or regulatory agencies, may impose restrictions or specific conditions on sample collection characteristics.

Comment: Some commenters stated the EPA should make clear that states can rely on CAM-type parameters as indicators of compliance. The commenters stated the EPA should make clear that states that follow the CAM rule model are not required to establish those "indicators" as directly enforceable limitations, as long as the SIP imposes directly enforceable review and corrective action requirements that will ensure that the source takes corrective action prior to the point when the indicator would predict noncompliance with an emission limitation.

Response: The EPA agrees with the commenters that one way regulatory authorities have owners or operators of regulated sources demonstrate compliance via ongoing monitoring is to use a CAM rule-type approach. Under such an approach, an owner or operator would be able to establish operating ranges of continuously monitored parameters determined through concurrent performance testing as indicators of performance (indicators of compliance are components of performance testing). Nothing in the CAM rule precludes an owner or operator from establishing parameters as directly enforceable limitations, and neither does this rule. The CAM rule-type approach would require owners or operators who chose parameter monitoring as indicative of compliance to immediately take corrective action should a measured parameter value occur outside the demonstrated range associated with compliance. Moreover, concurrent performance testing and parameter measurement would be necessary on a periodic basis and may be necessary on a more frequent basis to reverify or reset a parameter value range. Failure to take immediate corrective action would constitute a violation. Moreover, failure of a parameter range to demonstrate compliance when reverification or resetting performance testing occurred would also constitute a violation.

Comment: Commenters agreed that a compliance monitoring provision must specify a "measurement technique" and stated the EPA should defer to states regarding the most appropriate measurement techniques. The commenter disagreed that use of CEMS for "directly enforceable measurements" is always preferable.

Response: The EPA appreciates the commenters' support and notes that the measurement technique component used in this rule corresponds to a similarly-named component contained in the definition of monitoring in the general provisions of 40 CFR part 63. To the extent that regulatory authorities choose appropriate measurement techniques, the EPA agrees with the commenter. The EPA believes the commenters take the language regarding use of directly enforceable emissions measurements out of context; the EPA said it is preferred wherever feasible, not that it is always required.

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[259] Under the title V regulations, sources have an obligation to include in their title V permit applications, among other components, all emissions of pollutants for which the source is major, and all emissions of regulated air pollutants. *See, e.g.,* 40 CFR 70.5(c)(3). The definition of regulated air pollutant in 40 CFR 70.2 includes any pollutant for which the NAAQS has been promulgated, including $PM_{2.5}$.

Comment: Commenters stated the EPA should make clear that "averaging time" is only required for measurement techniques that collect continuous data that will be averaged over some period in order to assess source operations; *i.e.*, the element is only essential to certain types of compliance monitoring requirements. The commenters suggested the EPA should not attempt to impose or require minimum frequencies in terms of calendar days, months, or year and urged the EPA to allow states flexibility to determine how best to address operational variability.

Response: The EPA disagrees with the commenters, noting that averaging time remains an important aspect of demonstrating compliance via ongoing monitoring for all types of monitoring. It remains important to know how the period over which collected data are used to determine compliance, whether that period is daily, hourly, or annually. The EPA has not assigned minimum averaging times that regulatory authorities must use; however, the EPA expects those regulatory authorities to select averaging times appropriate to demonstrate compliance for specific types of sources.

Comment: Commenters supported the EPA's recommendation that information demonstrating compliance be made available online for general public access (80 FR 15448) so that the public can provide the oversight that the Act contemplates (42 U.S.C. 7604). Other commenters opposed an absolute requirement that all monitoring, testing, and reporting be done electronically since many permits are for small businesses who may not have the capital and technical expertise for electronic recordkeeping and reporting; commenters recommended that the EPA change this criterion into a recommendation that electronic means be used where feasible.

Response: The EPA agrees that electronic reporting and public access to information is important. The EPA notes that it is and has been moving towards electronic emissions reporting from all regulated sources for some time now. New NSPS and NESHAP require electronic emissions reporting, and efforts are underway to require existing NSPS and NESHAP to use electronic emissions reporting.[260] Consistent with this approach, and with the approach taken by the next generation of compliance program,[261] this rule will assist the shift toward electronic reporting to make environmental reporting more accurate, complete, and efficient. Moreover, electronic reporting of emissions will help us and regulatory authorities better manage information, improve effectiveness, and improve transparency.

F. Multi-Pollutant Considerations

1. Summary of Proposal

The EPA described many benefits of coordinating air quality planning efforts across a range of air quality programs addressing the NAAQS, air toxics, and climate change and encouraged states to pursue multipollutant planning approaches where possible.

2. Final Rule

The final rule reiterates many of the points made in support of multipollutant planning efforts in the proposal. Efforts to reduce fine particle concentrations fit well as part of multi pollutant planning efforts because of the involvement of $PM_{2.5}$ precursor gases (*i.e.*, NO_X, SO_2, VOC, and ammonia) and direct $PM_{2.5}$ emissions in a number of other air quality and climate issues. NO_X and VOC play important roles in atmospheric chemistry and in the formation of ground-level ozone. Certain VOCs and constituents of direct $PM_{2.5}$ are also hazardous air pollutants. SO_2 and NO_X emissions, and their reactions with ammonia to form ammonium sulfate and ammonium nitrate, have played important roles in acidic deposition, haze in national parks, and in fine particle formation. Black carbon from direct $PM_{2.5}$ emissions is an important short-lived climate pollutant. Increasing average temperatures due to climate change are expected to lead to higher ozone concentrations. Many efforts to address traditional air pollutants have important co-benefits in terms of reducing emissions of CO_2 and other GHGs, and vice versa. For these reasons, efforts to reduce air pollution to address multiple objectives can provide important benefits to states, the regulated community, and the general public.

Multipollutant planning issues have been an area of strong interest by scientists and policymakers for many years. In 1995–1997, the EPA sought recommendations from a federal advisory committee with broad stakeholder representation on ways to coordinate and make more efficient the implementation programs for upcoming ozone and $PM_{2.5}$ standards and the regional haze program. The National Academy of Sciences issued "Air Quality Management in the United States," a report on multipollutant planning issues and recommendations, in 2004. In June 2007, the EPA's CAA Advisory Committee (CAAAC) recommended that the agency allow states to integrate SIP requirements and other air quality goals into a comprehensive plan.[262] The recommended plan would demonstrate attainment/maintenance of multiple NAAQS, accomplish sector-based reductions, realize risk reductions of HAPs and make improvements in visibility. It could also be structured to integrate programs addressing land use, transportation, energy and climate.

The EPA believes that in many cases it can be more efficient for states to develop integrated control strategies that address multiple pollutants rather than separate strategies for individual air quality programs. An integrated air quality control strategy that reduces multiple pollutants can help ensure that reductions are efficiently achieved and produce the greatest overall air quality benefits. The EPA has encouraged states to take a multi-pollutant approach to managing air quality to the extent possible.

While the agency encourages states to develop multi-pollutant plans, it recognizes that certain factors can make such efforts challenging. For example, the NAAQS are to be reviewed every 5 years, and any revisions to the standards will lead to a series of implementation steps required by specific statutory schedules. In some cases program requirements and deliverables may not be coordinated easily, but in other situations there are good opportunities for conducting technical analyses and developing policy approaches that can have important health and environmental benefits while addressing multiple key air pollution issues at the same time.

One such opportunity is the increased use of multi-pollutant assessments. A multi-pollutant assessment, or one-atmosphere modeling, is conducted with a single air quality model (such as CMAQ or CAMx) that is capable of simulating transport and formation of multiple pollutants simultaneously.[263] For example, this type of model can simulate formation and deposition involving pollutants associated with $PM_{2.5}$, ozone and regional haze, and it can include algorithms simulating gas phase chemistry, aqueous phase chemistry, aerosol formation and acid deposition. This type of model could also include the formation and deposition of key air toxics and the chemical interactions that occur with these individual toxic species to produce $PM_{2.5}$ and ozone. It can also account for estimated changes in traditional air pollutant emissions resulting from programs (such as energy efficiency and renewable energy programs) to reduce emissions of CO_2 and other greenhouse gases.

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[260] *See* 80 FR 15099, March 20, 2015.

[261] *See http://www2.epa.gov/sites/production/files/2014-09/documents/next-gen-compliance-strategic-plan-2014-2017.pdf.*

[262] Recommendations to the Clean Air Act Advisory Committee: Phase II, June 2007, *http://www2.epa.gov/caaac/caaac-reports.*

Models and data analysis intended to address $PM_{2.5}$ could be beneficial for use in addressing ozone, visibility impairment, and climate change. States that undertake multi-pollutant assessments as part of their attainment demonstration have the opportunity to assess the impact of their $PM_{2.5}$ strategies on ozone, visibility, and climate programs to ensure that optimal emission reduction strategies are developed to the extent possible. This could facilitate addressing all of these pollutants in a more cost effective manner.

States may also find it desirable to assess the impact of $PM_{2.5}$, ozone, and/or regional haze control strategies on toxic air pollutants regulated under the CAA or under state air toxic initiatives. Given the relationships that exist between air toxics and the formation of $PM_{2.5}$ and ozone, states may find that controls can be selected to meet goals for $PM_{2.5}$ and/or ozone attainment as well as those of specific air toxic programs.

3. Comments and Response

Comments: Some commenters urged the EPA to provide assistance to those states that might be precluded from developing Multi-Pollutant SIPs due to lack of resources. Other commenters stated the EPA should support the states' use of various approaches and tools suggested the EPA make the Control Strategy (CoST) tool fully available, as well as provide any necessary training to facilitate states' ability to effectively use the tool. The commenter also suggested that the EPA entertain the possibility for states to demonstrate that the controls put in place to comply with multi-pollutant CAIR and CSAPR are valid and should be accepted as part of attainment demonstrations; allowing states to credit emissions reductions that have occurred.

Response: The Control Strategy Tool (CoST) is a component of the EPA's Emissions Modeling Framework that is a client-server system developed to support emissions modeling. CoST was developed by the EPA to model the emissions reductions and engineering costs associated with control strategies applied to point, area, and mobile sources of air pollutant emissions to support the analyses of the EPA air pollution policies and regulations. Links to the software and documentation are available at the EPA's CoST Web site at *http://www3.epa.gov/ttnecas1/cost.htm*. Note that because of resource limitations, the EPA is not able to provide any support for the installation or operation of CoST outside of the agency.

G. Measures to Ensure Appropriate Protections for Overburdened Populations

1. Summary of Proposal

The EPA requested comments on ways that states can provide public health protection specifically for overburdened populations when preparing attainment plans for the $PM_{2.5}$ NAAQS.

2. Final Rule

Environmentally overburdened, underserved, and economically distressed communities may be subject to a higher risk of pollutant-related health effects than the general population because they may be exposed to higher pollutant concentrations than the general population; they may experience a larger health impact at a given pollutant concentration; or they may be adversely affected by lower pollutant concentrations than the general population.[264] Thus, the NAAQS review process inherently takes into consideration appropriate environmental justice factors as part of the standard-setting process for each pollutant.

Section 109(d) of the CAA requires the EPA to periodically review (every 5 years) the science upon which the standards are based and the standards themselves. The policy assessment for the 2012 PM NAAQS review (U.S. EPA, 2011a, p. 2–60) observed that the highest concentrations of $PM_{2.5}$ in an area tend to be measured at monitors located in areas where the surrounding populations are more likely to live below the poverty line and to have higher percentages of minorities. In its 2012 review of the PM NAAQS, the EPA revised the primary annual $PM_{2.5}$ standard by lowering the level to 12.0 micrograms per cubic meter ($\mu g/m^3$) to provide increased protection against health effects associated with long- and short-term $PM_{2.5}$ exposures.[265] The agency also (1) revised the form of the primary annual $PM_{2.5}$ standard to eliminate the spatial averaging provisions to avoid potential disproportionate impacts on at-risk populations; and (2) directed states to relocate a limited number of existing monitors to near-roadway sites in large urban areas. Both of these actions were informed by scientific evidence that underscored the potentially disproportionate exposure to high $PM_{2.5}$ concentrations and therefore disproportionate risk to low-income and minority populations.

In conjunction with these revisions, the EPA retained the primary 24-hour $PM_{2.5}$ standard, as revised in 2006 (71 FR 61144, October 17, 2006), to provide supplemental protection against health effects associated with short-term $PM_{2.5}$ exposures, especially in areas with high peak $PM_{2.5}$ concentrations. This suite of primary annual $PM_{2.5}$ standards provides increased public health protection, including the health of at-risk populations which include children, older adults, persons with pre-existing health and lung disease, and persons of lower socioeconomic status, against a broad range of $PM_{2.5}$-related effects that include premature mortality, increased hospital admissions and emergency department visits, and development of chronic respiratory disease.[266]

Relationship between direct $PM_{2.5}$ emissions and $PM_{2.5}$ precursor

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[263] Depending on the context, "multi-pollutant" can be defined in different ways. In this context the agency is defining multi-pollutant modeling as simultaneous modeling of $PM_{2.5}$, ozone, key air toxics, and regional haze. Future multi-pollutant models may include the ability to model a broader array of air toxics as well as greenhouse gases.

[264] *See* EPA 2011. Policy Assessment for the Review of the Particulate Matter National Ambient Air Quality Standards, Office of Air Quality Planning and Standards, Research Triangle Park, NC, EPA 452/R–11–003, April 2011.

[265] 78 FR 3086 (January 15, 2013).

[266] In the final 2012 PM NAAQS rule, based on information presented in the *Integrated Science Assessment for Particulate Matter* (U.S. EPA, 2009, sections 2.2.1 and 8.1.7), the EPA made a finding that persons with lower socioeconomic status are at increased risk for experiencing adverse health effects related to PM exposures (78 FR 3085, January 15, 2013, at page 3104). Persons with lower socioeconomic status (SES) have been generally found to have a higher prevalence of pre-existing diseases, limited access to medical treatment, and increased nutritional deficiencies, which can increase this population's risk to PM-related effects (77 FR 38911, June 29, 2012).

emissions reductions and at-risk populations. Sources of direct PM emissions have their greatest impact on $PM_{2.5}$ concentrations and public health in the general vicinity of the source (*e.g.,* within 10 miles), while sources of precursor emissions can contribute to $PM_{2.5}$ concentrations more than 100 miles away and are considered to have a more regional impact. To date, state $PM_{2.5}$ attainment plans have generally relied to a greater extent on reductions of precursor pollutants rather than on reductions of direct $PM_{2.5}$ emissions. Studies show, however, that on a per ton basis, the reduction of a ton of direct $PM_{2.5}$ emissions leads to greater health benefits than the reduction of a ton of SO_2 or NO_X.[267]

The process for developing attainment plans for the current and future $PM_{2.5}$ NAAQS presents a potential opportunity to target the health protections afforded by the NAAQS, as the EPA expects that attainment for the 2012 $PM_{2.5}$ NAAQS and future $PM_{2.5}$ NAAQS in nonattainment areas with the most severe pollution problems may need to give greater emphasis to reducing direct $PM_{2.5}$ emissions in combination with efforts already underway to further reduce precursor emissions. Placing greater emphasis on reducing emissions from sources of direct $PM_{2.5}$ (*e.g.,* certain industrial facilities located in more densely populated areas; areas with high motor vehicle and other diesel engine emissions, such as rail yards and near major roadways; and, areas with high wood smoke emissions) could provide the added benefit of reducing exposure to $PM_{2.5}$ in low-income and minority communities.

Options for states to consider to ensure appropriate protections from $PM_{2.5}$ exposure for overburdened populations. The EPA believes that states have sufficient flexibility and discretion under the CAA in implementing their attainment strategies to focus resources on controlling those sources of emissions that directly and adversely affect low-income and other at risk populations. By reducing impacts on at-risk populations, states can maximize health benefits, thereby creating greater net benefits for the state in a cost-effective manner.[268] In addition, reducing adverse impacts to low-income and minority populations advances the environmental justice goal of fair treatment for these populations.

There are a number of actions that states could take to focus resources in this way. Some of these actions can help identify areas where additional ambient monitoring may be needed in low income and overburdened communities. Such information can be used to support updates to the state's annual monitoring plan.

Screening is a useful first step in understanding or highlighting locations that may be candidates for further review. The EPA has developed EJSCREEN, a public screening tool that allows users to access high-resolution environmental and demographic information for locations in the United States, and compare their selected locations to the rest of the state, the EPA region, or the nation. The tool may help users identify areas with minority and/or low-income populations, potential environmental quality issues, a combination of environmental and demographic indicators that is greater than usual, and other factors that may be of interest. Other examples of actions to support updates to the annual monitoring plan include:

- Develop databases and online mapping tools that enable users (including state staff, public, and the regulated community) to understand where sources of direct $PM_{2.5}$ emissions are located and where new or modified sources of emissions could have potential impacts on low income and other overburdened communities;
- Incorporate existing mapping tools that identify target areas in the attainment plan development process and related actions; and,
- Analyze emissions data, ambient data, and available modeling to identify potential unmonitored $PM_{2.5}$ hotspots in areas with a high percentage of low income, minority or indigenous persons (*see* Section III.E of this preamble for further discussion of this option).

Once target areas for addressing these sensitive population needs within a nonattainment area have been identified, the state could consider taking any of the following actions, which help target emissions reductions that may be needed to attain the $PM_{2.5}$ NAAQS:

- Prioritize the selection of control measures that target reductions of direct $PM_{2.5}$, particularly from sources located in "at-risk" areas as part of the state's RACM and RACT analysis (for Moderate nonattainment areas) or BACM and BACT analysis (for Serious nonattainment areas), as well as other measures needed to demonstrate attainment (*see* Sections III.D and V.D of this preamble, respectively, of this preamble for further discussion of this option);
- Improve the understanding of the potential impact of minor sources by improving or generating an emissions inventory for such minor sources, including sources that are not currently required to report emissions, to generate options on how emissions can be reduced in the target area;
- Design voluntary programs to reduce VMT and mobile source-related $PM_{2.5}$ emissions (*e.g.,* diesel retrofits);
- Incorporate environmental justice criteria into the alternatives analysis to ensure appropriate siting and require cumulative impact studies for proposed projects;
- Eliminate exemptions from and/or lower thresholds for minor source permitting;
- Prioritize targeted enforcement strategies; and
- Develop a list of potential supplemental environmental projects (SEPs)[269] that could be applied in the target area.

In addition to the previous steps, states could increase opportunities for meaningful involvement of community groups in attainment plan development, annual monitoring network plan reviews, and permitting processes[270] for at-risk and minority populations by taking the following steps:

- Develop advisory boards and/or develop enhanced notice-and-comment requirements for low income and minority communities to assure meaningful involvement relative to projects that impact their communities;
- Provide special notice of important actions affecting target areas in appropriate languages and with attention to cultural barriers;
- Provide advance notification for low income and minority communities of upcoming opportunities for public comment on SIPs, ambient air monitoring plans, and other relevant actions such as permit actions;
- Maintain multi-lingual Web sites and offer translators for public meetings and hearings; and,
- Coordinate with the state's EJ coordinator, if applicable, to assist with outreach efforts.

3. Comment and Response

Comment: Some commenters supported the EPA's recommendations for measures to ensure protections for overburdened communities, but stated that the EPA's proposal to allow areas to ignore near-roadway monitors is inconsistent with these objectives. The commenter stated that communities near heavily trafficked areas tend to be disproportionately low-income minority communities that suffer from disproportionately higher $PM_{2.5}$ exposure risks; and that the EPA and states should address the information gaps that disempower these communities in their ability to protect themselves from pollution sources. The commenter also stated that making sources disclose and report compliance information and providing that information in easy to access formats would go a long way to improve the ability of these communities to be informed of their risks and to assure compliance in their communities.

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[267] *See* Fann, N., Fulcher, C., and B. Hubbell, 2009. The Influence of location, source, and emission type in estimates of the human health benefits of reducing a ton of air pollution. Air Quality, Atmosphere & Health. Volume 2, Number 3, 169–176, June 2009. *See also* Fann et al., 2011. Maximizing health benefits and minimizing inequality: incorporating local-scale data in the design and evaluation of air quality policies. Society for Risk Analysis, vol. 31, no. 6, p. 908–922, June 2011.

[268] Wesson, K., Fann, N., Morris, M, Fox, T., Hubbell, T., 2010. A multipollutant, risk-based approach to air quality management. Case study for Detroit. *Atmospheric Pollution Research,* 1, 296–304. The study compared air quality control strategies and concluded that the multi-pollutant, risk-based approach was able to produce approximately two times greater monetized benefits through avoided health impacts and was more cost effective than a pollutant-by-pollutant approach.

[269] For more information on SEPs, go to *https://www.epa.gov/enforcement/supplemental-environmental-projects-seps.*

[270] *See* 78 FR 27220 (May 9, 2013) notice of availability, "EPA Activities To Promote Environmental Justice in the Permit Application Process."

Response: The EPA agrees that near-road monitoring data should not be ignored in future attainment planning. However, the EPA wishes to clarify that the statements in the proposal referenced the fact that the near-road monitors were not required to be in place before January 1, 2015. Compliance with the $PM_{2.5}$ standards is based on 3 years of complete, quality-assured data at a monitor. Thus, the earliest that these monitors would have valid design values would be in early 2018 (based on data from 2015–2017). This timing makes it unlikely that sufficient data from these monitors will be available to be considered in attainment demonstrations that are due in 2016. In addition, the base modeling year of the attainment demonstration may pre-date the startup date of the near-road monitor(s). In this case, it may be possible to consider the near-road data in the attainment demonstration, but the recommended default projection methodology may not be applicable (since the time period of the near-road data may not correspond to the 5 year time period centered about the base modeling year, as recommended in the modeling guidance). Additionally, near-road $PM_{2.5}$ monitors are only required in the 27 largest metropolitan areas of the country, and some $PM_{2.5}$ nonattainment areas may not have any near-road monitoring sites. Thus, when complete data from near-road $PM_{2.5}$ ambient monitors become available, the data should be used by states and the EPA for all aspects of the NAAQS implementation process, from attainment planning to the determination of attainment, in a manner similar to any other quality-assured $PM_{2.5}$ monitoring data. States should consult with the appropriate the EPA regional office to determine how and when near-road data should be used in the $PM_{2.5}$ NAAQS implementation process for specific nonattainment areas.

With regard to the comment about having easy access to facility compliance information, the EPA directs the commenter to the Enforcement and Compliance History Online Web site to search for facilities to assess compliance with environmental regulations. The site provides the ability to investigate pollution sources, examine and create enforcement-related maps, or explore an individual state's performance. As noted earlier in this section, the EJSCREEN tool can also provide important information about estimated pollution impacts in specific communities.

H. Tribal Issues

The 1998 Tribal Authority Rule (TAR) (40 CFR part 49), which implements section 301(d) of the CAA, gives tribes the option of developing Tribal Implementation Plans (TIPs). Specifically, the TAR provides for the tribes to be treated in the same manner as a state in implementing certain sections of the CAA. However, tribes are not required to develop implementation plans. The EPA determined in the TAR that it was inappropriate to treat tribes in a manner similar to a state with regard to specific plan submission and implementation deadlines for the NAAQS-related requirements, including, but not limited to, such deadlines in CAA sections 110(a)(1), 172(a)(2), 182 187, and 191. *See* 40 CFR 49.4(a). In addition, the EPA determined it was not appropriate to treat tribes similarly to states with respect to provisions of the CAA requiring as a condition of program approval the demonstration of criminal enforcement authority or providing for the delegation of such criminal enforcement authority. *See* 40 CFR 49.4(g). To the extent a tribe is precluded from asserting criminal enforcement authority, the federal government will exercise primary criminal enforcement responsibility. *See* 40 CFR 49.8. In such circumstances, tribes seeking approval for CAA programs provide potential investigative leads to an appropriate federal enforcement agency.

If a tribe elects to do a TIP, the agency will work with the tribe to develop an appropriate schedule that meets the needs of the tribe and does not interfere with the attainment of the NAAQS in other jurisdictions. The tribe developing a TIP can work with the EPA Regional Office on the appropriateness of addressing RFP and other substantive SIP requirements that may or may not be appropriate for the tribe's situation.

The CAA and the TAR provide tribes opportunity and flexibility, but not the obligation to develop a TIP to address the NAAQS. If a tribe elects to develop a TIP, the TAR offers flexibility for the tribe to identify and implement on a case-by-case basis only those CAA programs or reasonably severable program elements needed to address their specific air quality problems. In the TAR, the EPA described this flexible implementation approach as a modular approach. Each tribe may evaluate the particular activities, including potential sources of air pollution within the exterior boundaries of its reservation (or within non-reservation areas for which it has demonstrated jurisdiction), that cause or contribute to its air pollution problem. A tribe may adopt measures for controlling those sources of $PM_{2.5}$-related emissions, as long as these elements of the TIP are reasonably severable from other CAA requirements. A TIP must include regulations designed to solve specific air quality problems for which the tribe is seeking the EPA's approval, as well as a demonstration that the tribal air agency has the authority from the tribal government to develop and run their program, the capability to enforce their rules, and the resources to implement the program they adopt. In addition, the tribe must receive an eligibility determination from the EPA to be treated in the same manner as a state for the particular matter at issue and to receive authorization from the EPA to run a CAA program.

The EPA would review and approve, where appropriate, these TIPs as one step of an overall air quality plan to attain the NAAQS. A tribe may step in later to add other elements to the plan, or the EPA may step in to fill gaps in the air quality plan as necessary or appropriate. In approving a TIP, the agency would evaluate whether the plan appropriately coordinates with the overall air quality plan for an area when tribal lands are part of a multi-jurisdictional area.

Because many $PM_{2.5}$ nonattainment areas will include multiple jurisdictions, and in some cases both Indian country and state lands, it is particularly important for the tribes and the states to work together to coordinate their planning efforts. States need to incorporate Indian country emissions in their base emissions inventories if Indian country is part of an attainment or nonattainment area.[271] Tribes and states should coordinate their planning activities as appropriate to ensure that neither is adversely affecting attainment of the NAAQS in the area as a whole. Coordinated planning in these areas will help ensure that the planning decisions made by the states and tribes complement each other and that the nonattainment area makes reasonable progress toward attainment and ultimately attains the applicable $PM_{2.5}$ NAAQS. In reviewing and approving individual TIPs and SIPs, the EPA will determine if together they are consistent with the overall air quality needs of an area.

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[271] On January 17, 2014, the United States Court of Appeals for the District of Columbia Circuit

To date, very few tribes have submitted for the EPA's approval TIPs covering areas over which they have jurisdiction. In the absence of a TIP, the EPA is authorized under the TAR to implement CAA programs in such areas as necessary or appropriate. For example, an unhealthy air quality situation on an Indian reservation may require the EPA to develop a FIP to reduce emissions from sources on the reservation. Likewise, if the agency determines that sources in an area under tribal jurisdiction could interfere with a larger nonattainment area meeting the NAAQS by its attainment date, it would develop a FIP for those sources in consultation with the tribe as necessary or appropriate.

States have an obligation to notify other states in advance of any public hearing(s) on their state plans if such plans will significantly impact such other states. 40 CFR 51.102(d)(5). Under section 301(d) of the CAA and the TAR, tribes may become eligible to be treated in a manner similar to states (TAS) for this purpose. Affected tribes with this status must also be informed of the contents of such state plans and given access to the documentation supporting these plans. In addition to this mandated process, the EPA encourages states to extend the same notice to all affected tribes, regardless of their TAS status.

Executive Orders and the EPA's Indian policies generally call for the EPA to coordinate and consult with tribes on matters that affect tribes. Executive Order 13175, titled, "Consultation and Coordination with Indian Tribal Governments" requires the EPA to develop a process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have Tribal implications." In addition, the EPA's policies include the agency's 1984 Indian Policy relating to Indian tribes and implementation of federal environmental programs, the 2014 Office of Air and Radiation's "Handbook for Interacting with Tribal Governments," and the "EPA Policy on Consultation and Coordination with Indian Tribes." Consistent with these policies, the EPA intends to meet with tribes on activities potentially affecting the attainment and maintenance of the current and future $PM_{2.5}$ NAAQS in Indian country, including agency actions on SIPs. As such, it would be helpful for states to work with tribes with land that is part of the same air quality area during the SIP development process and to coordinate with tribes as they develop their SIPs.

I. Voluntary Programs for Reducing Ambient $PM_{2.5}$

1. PM Advance Program

The EPA believes there are significant advantages for states, tribes and local agencies to take steps to reduce direct $PM_{2.5}$ emissions and emissions of $PM_{2.5}$ precursors as early as possible. First and foremost, early reductions help to achieve cleaner air sooner, and help to ensure continued health protection. Second, early steps could help an area avoid a nonattainment designation in the first place, or for an area eventually designated as nonattainment, early reductions could help bring the area back into attainment sooner, which may lead to qualifying for a CDD and subsequent suspension of attainment planning requirements as described in Section IX.C of this preamble. In addition, early action to improve air quality can help an eventual nonattainment area, particularly an area that has never been designated nonattainment before, to establish working relationships between key stakeholders. The EPA's expectation is that early actions to reduce emissions in such areas would be less resource-intensive than actions taken once a nonattainment designation has been made, since at that point the implementation of controls would need to occur in conjunction with actions to comply with other requirements such as nonattainment NSR and transportation conformity.

In January 2013, the EPA began a new early emissions reduction program for attainment areas called "PM Advance," which is much like the related "Ozone Advance" program that began in April 2012. For additional information and a list of areas that are currently participating in the program, *see https://www.epa.gov/advance.*

2. Residential Wood Smoke Programs

The EPA recognizes that residential wood smoke is a concern for many nonattainment areas. The EPA estimates that wood stoves, indoor wood furnaces, hydronic heaters and fireplaces emit more than 382,000 tons of $PM_{2.5}$ into the air throughout the country each year—mostly during the winter months. Residential wood smoke can increase fine particle pollution to levels that cause significant health concerns (*e.g.,* asthma attacks, heart attacks, premature death). Wood smoke causes many counties throughout the U.S. to either exceed the national health-based standards for fine particles, or places them on the cusp of exceeding the standards. Because wood stoves, hydronic heaters and other similar appliances can be used around the clock in residential areas, they can cause significant and varying health and quality of life issues.

To reduce fine particle pollution, many $PM_{2.5}$ nonattainment areas will need to address residential wood smoke. The EPA has developed the "Strategies for Reducing Residential Wood Smoke" document that provides education and outreach tools, information on regulatory approaches to reduce wood smoke, as well as information about voluntary programs that communities around the country have used.[272] In addition, it includes methods for calculating emissions reductions, funding ideas and the basic components of a wood smoke reduction plan that can be adopted into a SIP as an enforceable control measure.[273] To access the document, go to *https://epa.gov/burnwise/burn-wise-strategies-reducing-residential-wood-smoke.* For

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issued a decision vacating the EPA's 2011 rule titled "Review of New Sources and Modifications in Indian Country" (76 FR 38748, July 1, 2011) with respect to non-reservation areas of Indian country (*See Oklahoma Department of Environmental Quality* v. *EPA,* 740 F.3d 185 (D.C. Cir. 2014)). Under the court's reasoning, with respect to CAA state implementation plans, a state has primary regulatory jurisdiction in non-reservation areas of Indian country (*i.e.,* Indian allotments located outside of reservations and dependent Indian communities) within its geographic boundaries unless the EPA or a tribe has demonstrated that a tribe has jurisdiction over a particular area of non-reservation Indian country within the state.

[272] On February 3, 2015, the EPA strengthened the New Source Performance Standards (NSPS) for new residential wood heaters and established NSPS for other new wood heaters, including outdoor and indoor wood-fired boilers (also known as hydronic heaters). The standards will reduce emissions of direct $PM_{2.5}$ as well as carbon monoxide, VOC, air toxics (including formaldehyde, benzene and polycyclic organic matter), and black carbon. *See http://www2.epa.gov/residential-wood-heaters.*

[273] For further guidance on incorporating voluntary measures into a SIP, *see* "Incorporating Emerging and Voluntary Measures in a State Implementation Plan (SIP)." U.S. EPA. Office of Air and Radiation. September 2004. Available at *http://www3.epa.gov/ttn/caaa/t1/memoranda/evm_ievm_g.pdf.*

more information on the EPA's wood smoke reduction program, *see https://www.epa.gov/burnwise.*

J. Improved Stationary Source Emissions Monitoring

1. Summary of Proposal

For purposes of demonstrating compliance with the EPA's air quality regulatory requirements, the EPA, states, and sources rely on two basic types of monitoring: ambient air quality monitoring and stationary source emissions monitoring. Ambient air quality monitoring entails collecting and measuring samples of criteria pollutants in ambient air to evaluate air quality as compared to clean air standards and historical information. Stationary source emissions monitoring, on the other hand, entails collecting and using measurement data (or other information) from individual stationary sources to demonstrate compliance with emissions standards, to assess process or control device performance, or to verify work practices. While ambient air quality monitoring is used to assess compliance with the NAAQS, stationary source emissions monitoring is used to assess compliance with source-specific regulations under programs like the New Source Performance Standards (NSPS), the National Emissions Standards for Hazardous Air Pollutants (NESHAP), the compliance assurance monitoring (CAM) program, the title V air operating permits program, and the acid deposition control program, as well as specific SIP control measures.

Accurate stationary source emissions monitoring is also critical for the purposes of developing accurate emissions inventories and in order to identify appropriate control measures to reduce emissions from stationary sources. In addition, after control measures are in place, stationary source emissions monitoring provides process and control device performance information to the facility operator so that appropriate corrective action can be taken if indicated that emission levels may exceed applicable thresholds. Thus, appropriate stationary source emissions monitoring requirements, like the control measures with which they are associated, are a fundamental element of an approvable SIP.

Because of the important role that effective stationary source emissions monitoring can play in informing the development of attainment strategies for $PM_{2.5}$ NAAQS nonattainment areas, the EPA is interested in applied best practices for stationary source emissions monitoring that could be included in guidance for other stationary sources and states. As a result of this interest, the EPA sought to gather information about ways to make the source emissions monitoring data collection process easier and more transparent. In the proposal, the EPA therefore asked for information regarding appropriate examples and supporting data from individual sources and states with experience in this area to inform such future guidance. The EPA sought comment on specific topics and questions regarding source monitoring techniques and asked commenters to submit any examples of improved stationary source emissions monitoring and any other methodologies—complete with equations and explanations—for estimating emissions reductions due to improved monitoring.

2. Final Rule

The EPA did not propose any specific changes to source monitoring requirements for $PM_{2.5}$ and is therefore not finalizing any specific requirements, beyond what is required elsewhere in the final rule.

3. Comments and Responses

Comment. Several commenters focused on critiquing PM CEMS, PM CPMS and BLDS technology and claim that improved monitoring changes the stringency of existing rules and requires rulemaking. The commenters provided no examples or specific information in response to the request for information.

Response. We appreciate the information submitted by the commenters, but we are not responding to the comments here because they are not directly pertinent to the rule being finalized. The EPA will continue to explore and implement innovative, cost-effective ideas that offer tangible incentives for improved source monitoring to be adopted as part of the associated emissions limitations that will help achieve additional reductions from stationary sources and bring areas into attainment for the $PM_{2.5}$ NAAQS in a timely way. *See* the response to comments document for more detailed information.

K. Stationary Source Test Methods for Emissions of Condensable $PM_{2.5}$

1. Summary of Proposal

As discussed in the proposal, direct $PM_{2.5}$ is comprised of two components: Filterable $PM_{2.5}$ and condensable $PM_{2.5}$ emissions. Accurate test methods for condensable $PM_{2.5}$ emissions have only been recently developed and approved by the EPA, and in the proposal the EPA explained that use of these test methods, including methods to quantify condensable $PM_{2.5}$ emissions, were essential for identifying sources of direct $PM_{2.5}$ emissions which, if better controlled, can help to bring a $PM_{2.5}$ nonattainment area into attainment. However, the EPA did not propose any changes to those test methods.

The EPA did propose to require that, where a state needs to adopt new or revised control measures for direct $PM_{2.5}$ from sources in a nonattainment area, the state must specify $PM_{2.5}$ emission limits in its SIP that include both filterable and condensable emissions. In addition, compliance testing of those sources must include measurement of condensable emissions (such as through the use of Method 202). The EPA proposed that any new or revised emission limit used as a control measure to bring an area into attainment for any current or future $PM_{2.5}$ NAAQS must use methods that measure $PM_{2.5}$ or total PM including both filterable and condensable particulate matter.

The 2007 $PM_{2.5}$ Implementation Rule required, beginning on January 1, 2011, that states take into consideration condensable $PM_{2.5}$ emissions when establishing emission limits for stationary sources as part of any control strategy for $PM_{2.5}$ NAAQS nonattainment areas.[274] This date coincided with the effective date of the agency's revisions to test methods for measuring filterable PM_{10} emissions from stationary sources (Method 201A) and for measuring condensable PM emissions from stationary sources (Method 202).[275] The revisions to those test methods added procedures to measure $PM_{2.5}$ filterable and condensable particulate material and increased the precision of Method 202 and improved the consistency in the measurements obtained between source tests performed under different regulatory authorities.

In the preamble to the 2007 $PM_{2.5}$ Implementation Rule, the EPA explained that the use of the (then anticipated) revisions to the EPA Method 201A combined with Method 202 to obtain measured source specific emissions of $PM_{2.5}$ would improve the quality of emissions inventories for stationary sources and would aid in the development of a more reliable attainment strategy, as sources that may have a considerable amount of condensable $PM_{2.5}$ emissions could be better characterized with the new methods.

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[274] 72 FR 20586 (April 25, 2007).

[275] 75 FR 80118 (December 21, 2010).

2. Final Rule

The EPA is finalizing the $PM_{2.5}$ emissions limit and testing requirement as proposed. For sources that are required to adopt a new or revised direct $PM_{2.5}$ emissions limit as part of the attainment demonstration (including, but not limited to, for RACT, BACT, or MSM), the state must specify $PM_{2.5}$ emission limits in its SIP that include both filterable and condensable emissions. In addition, compliance testing requirements for those sources must include both measurement of filterable and condensable emissions. Existing filterable PM emission limitations that are not being revised as part of a Moderate area or Serious area attainment plan can remain expressed in terms of filterable PM and can rely on the existing test method used by the state for compliance determination.

The EPA continues to believe that using these improved test methods, including methods to quantify condensable $PM_{2.5}$ emissions, can help identify sources of direct $PM_{2.5}$ emissions which, if better controlled, can help to bring a $PM_{2.5}$ nonattainment area into attainment. Likewise, use of these test methods may help a state identify sources whose condensable emissions may have been incorrectly estimated and therefore may not provide meaningful $PM_{2.5}$ control opportunities.

3. Comments and Responses

Comment: Some commenters stated that the EPA should make clear that as long as testing and monitoring is required for any new filterable and/or condensable PM emission limitation imposed, testing for "total $PM_{2.5}$" is not required and the EPA should allow states flexibility in determining the best way to demonstrate compliance with any new emission limitations. The new emission limitation could take the form either of a limitation on condensable $PM_{2.5}$ or a limitation on total direct $PM_{2.5}$ emissions. The commenter further stated the EPA should make clear that states that specify condensable PM or total $PM_{2.5}$ emission limitations are not required to adopt Method 202 as the compliance test method.

Response: In the final rule, the EPA is requiring new or revised $PM_{2.5}$ emissions limits and associated source testing to account for condensable emissions, but the EPA is not imposing any specific source testing requirements that would require total $PM_{2.5}$ testing or the use of a specific test method. The EPA acknowledges that states have flexibility to determine the necessary emissions limitations of $PM_{2.5}$ to meet SIP requirements for the NAAQS attainment. When states assess the contribution of the filterable and condensable PM component to $PM_{2.5}$ they may require stationary source tests that include both filterable $PM_{2.5}$ and condensable particulate matter to ensure emission limits are attained by subject facilities. Since we recognize that primary $PM_{2.5}$ emissions can be measured with the combination of several promulgated test methods depending on the stationary source emission temperature and moisture content, states have the flexibility to require the appropriate filterable and condensable particulate measurement methods based on source conditions.

Comment: Some commenters agreed with the EPA's proposal not to require consideration of condensable PM in any existing emission limitations that are not otherwise being revised. The commenters stated that no purpose would be served by requiring states to include condensable PM in such standards if no revision is necessary to demonstrate attainment. Other commenters objected to the EPA's proposal to not require states to update all existing PM emission limitations to include limitations on condensable PM. The commenters stated the EPA's proposal is nonsensical and undermines any ability to demonstrate compliance with the Act. The commenters stated that, by the EPA's own admission, inventories that do not reflect measured condensables from direct $PM_{2.5}$ sources are not an "accurate" inventory of "actual emissions." The commenters further stated that, similarly, areas could not satisfy the criteria for RACM or BACM, or demonstrate expeditious attainment if the existing state emission limitations are not required to be updated to account for condensable emissions from these sources.

Response. The EPA agrees with the commenters who maintain that existing $PM_{2.5}$ emissions limits do not need to be revised to include emissions limits for condensable PM for sources from which additional emissions reductions are not needed in order to demonstrate attainment. The EPA does not agree that all existing direct $PM_{2.5}$ emissions limits in the SIP have to include emissions limits that account for or specifically address condensable PM. However sources with new or revised $PM_{2.5}$ emissions limits and associated source testing must account for condensable emissions.

If the state has submitted an attainment demonstration that includes an adequate RACT, BACT, and/or MSM analysis, and has taken into account all known emissions of filterable and condensable $PM_{2.5}$ in the area, then there is no need to require new condensable $PM_{2.5}$ emissions limits and testing for sources that were not needed to be additionally controlled for attainment purposes. The state may want to require additional condensable $PM_{2.5}$ emissions limits and testing to gain a better understanding of the sources in the nonattainment area (especially for sources which may be most likely to emit condensables). This could provide additional information for future SIPs and control programs if nonattainment persists. However, unless specific direct $PM_{2.5}$ emissions reductions are shown to be needed in order for the area to attain the NAAQS, there does not need to be a SIP requirement to include new condensable emissions limits and testing for all existing sources with $PM_{2.5}$ emissions limits.

Additionally, the commenters stated that emissions inventories would not be "accurate" and states could not satisfy their RACM/BACM requirements if condensable emissions were not included in the SIP. Regardless of emissions limits and source testing requirements, quantification and reporting of filterable and condensable $PM_{2.5}$ emissions is required as part of the emissions inventory and RACT/BACT rule requirements. In some cases, condensable $PM_{2.5}$ information is available from previous source testing. In other cases, condensable $PM_{2.5}$ emissions must be estimated through the use of emissions factors that have been developed from source testing of similar sources. States are therefore already required to take into account both filterable and condensable emissions as part of their inventory and control strategy (RACT/BACT) development. *See* section IV.B of this preamble for more information on emissions inventory requirements, section IV.D of this preamble for more information on RACT requirements, and section VI.D of this preamble for more information on BACT requirements.

X. Revocation of the 1997 Primary Annual $PM_{2.5}$ NAAQS

A. Summary of the Proposal

The EPA proposed two options for revoking the 1997 primary annual $PM_{2.5}$ NAAQS and sought comment on whether to revoke the NAAQS at the current time.

The two proposed options were:

- *Option 1:* Revoke the 1997 primary annual $PM_{2.5}$ NAAQS for all purposes *in attainment areas* for that NAAQS 1 year after the effective date of the designations for the 2012 primary annual $PM_{2.5}$ NAAQS; and
- *Option 2:* Revoke the 1997 primary annual $PM_{2.5}$ NAAQS for all purposes *in all*

nonattainment and attainment areas for that NAAQS 1 year after the effective date of the designations for the 2012 primary annual $PM_{2.5}$ NAAQS.

Under the first proposed option, the EPA would revoke the 1997 primary annual $PM_{2.5}$ NAAQS for all purposes in areas that are designated as attainment for that NAAQS 1 year after the effective date of designations for the 2012 primary annual $PM_{2.5}$ NAAQS, as well as in the future as additional areas are redesignated as attainment areas after the initial revocation. The areas addressed by this option are:

- Those that were originally designated as attainment areas for the 1997 annual $PM_{2.5}$ NAAQS; and
- those that were originally designated as nonattainment but have since or will in the future be redesignated to attainment for that NAAQS.

Under this option, the EPA would not revoke the 1997 primary annual $PM_{2.5}$ NAAQS in any area as long as it is designated nonattainment for that NAAQS. This option is consistent with the approach established for the transition to the current lead and SO_2 NAAQS.

Areas designated nonattainment for the 2012 primary annual $PM_{2.5}$ NAAQS would be required under Option 1 to comply with applicable CAA requirements as set forth in the CAA. For transportation conformity purposes, these requirements began to apply 1-year after the effective date of designations and include using adequate or approved SIP motor vehicle emissions budgets for the 1997 annual $PM_{2.5}$ NAAQS or the 2006 24-hour $PM_{2.5}$ NAAQS where they exist until the area has approved or adequate budgets for the 2012 primary annual $PM_{2.5}$ NAAQS.[276] Areas that have adequate or approved motor vehicle emissions budgets for both the 1997 annual $PM_{2.5}$ NAAQS or the 2006 24-hour $PM_{2.5}$ NAAQS should refer to Question 3.3 in EPA's "Implementing Transportation Conformity Guidance for 2012 $PM_{2.5}$ Nonattainment Areas" for additional information on which budgets to use in conformity determinations prior to having adequate or approved budgets for the 2012 primary annual $PM_{2.5}$ NAAQS.[277] The use of such budgets serves as the appropriate anti-backsliding measure for transportation conformity purposes.

Under the second proposed option, the EPA would revoke the 1997 primary annual $PM_{2.5}$ NAAQS for all CAA purposes in all nonattainment and attainment areas 1 year after the effective date of designations for the 2012 primary annual $PM_{2.5}$ NAAQS. The requirements associated with revoking the 1997 primary annual $PM_{2.5}$ NAAQS in attainment areas for that NAAQS would be the same as those that would apply under Option 1. However, revoking the 1997 primary annual $PM_{2.5}$ NAAQS in nonattainment areas for that NAAQS would require anti-backsliding measures for areas designated nonattainment for the 1997 annual $PM_{2.5}$ NAAQS at the time of the revocation. For details on the proposed anti-backsliding measures, refer to the discussion in the proposal for this final rule. (80 FR 15340)

The EPA also requested comment on not revoking the 1997 primary annual $PM_{2.5}$ NAAQS at this time. For additional details on all of the proposed options refer to the proposal. (80 FR 15340)

The EPA did not propose to revoke the 1997 secondary annual $PM_{2.5}$ NAAQS in this action because that NAAQS has been retained in order to prevent certain welfare effects associated with $PM_{2.5}$.[278]

For details on past revocations of the NAAQS including the 1-hour and 1997 ozone NAAQS and prior SO_2 and lead NAAQS, refer to the proposal for this final rule. (80 FR 15340)

B. Final Rule

The EPA is finalizing the revocation of the 1997 primary annual $PM_{2.5}$ NAAQS for all purposes in attainment areas for that NAAQS as described in Option 1. *See* 40 CFR 50.13(d). The EPA had proposed that the revocation would be effective 1 year after the effective date of designations for the 2012 primary annual $PM_{2.5}$ NAAQS. Those designations were effective on April 15, 2015. (80 FR 2206) Therefore, the proposed effective date of the revocation was effectively April 15, 2016. However, this final rule will not be effective before April 15, 2016. Therefore, the EPA is establishing the effective date of this final rule as the effective date of the revocation of the 1997 primary annual $PM_{2.5}$ NAAQS.

On the effective date of this final rule, the 1997 primary annual $PM_{2.5}$ NAAQS will be revoked for all purposes in all attainment areas for that NAAQS, including the areas that were initially designated attainment for the 1997 annual $PM_{2.5}$ NAAQS. The final rule will have no practical impact on these areas that have always attained the 1997 primary annual $PM_{2.5}$ NAAQS. These areas have never been required to conduct air quality planning for this NAAQS for any CAA nonattainment purpose, although these areas would continue to implement applicable PSD requirements.

This final rule also revokes the 1997 primary annual $PM_{2.5}$ NAAQS in areas that have been redesignated to attainment for this NAAQS (*i.e.,* maintenance areas for this NAAQS). These areas will be required to implement their approved maintenance plan for the 1997 primary annual $PM_{2.5}$ NAAQS and their PSD program. The approved maintenance plan can only be revised if the revision meets the requirements of CAA section 110(l) and, if applicable, CAA section 193,

Similarly, all states will be required to continue to implement applicable control requirements in a FIP or approved SIP designed to address the interstate transport requirements of CAA section 110(a)(2)(D)(i) and (ii) with respect to the 1997 primary annual $PM_{2.5}$ NAAQS, such as CAIR or CSAPR. These requirements continue to be necessary for downwind nonattainment areas to make progress towards attainment and to assure that the air quality protection achieved in all areas is maintained into the future. These provisions may only be modified if the revision meets the requirements of section 110(l). A similar provision was finalized to preserve interstate transport requirements with respect to the revocation of the 1997 ozone NAAQS. *See* 40 CFR 51.1105.

For areas that remain nonattainment for the 1997 annual $PM_{2.5}$ NAAQS, the EPA will continue to redesignate areas to attainment as appropriate. For an area that is redesignated to attainment after the effective date of this final rule, the 1997 primary annual $PM_{2.5}$ NAAQS will be revoked in such an area on the effective date of its redesignation to attainment for that NAAQS. The EPA will not revoke the 1997 primary annual $PM_{2.5}$ NAAQS in any area as long as it is designated nonattainment for that NAAQS. Until the 1997 primary annual $PM_{2.5}$ NAAQS is revoked, that NAAQS remains in effect, in parallel with the 2012 primary annual $PM_{2.5}$ NAAQS, and continues to apply independently and by its own terms.

After revocation of the 1997 primary annual $PM_{2.5}$ NAAQS in a given area, the designation for that standard is no longer in effect. The only $PM_{2.5}$ designations that remain in effect in areas where the 1997 primary annual $PM_{2.5}$ NAAQS has been revoked are those for the 1997 24-hour $PM_{2.5}$ NAAQS, the 1997 secondary annual $PM_{2.5}$ NAAQS, the 2006 24-hour $PM_{2.5}$ NAAQS and the 2012 primary annual $PM_{2.5}$ NAAQS. However, the EPA is retaining the listing of the designated areas for the 1997 annual $PM_{2.5}$ NAAQS in 40 CFR part 81, for the purposes of identifying which areas remain designated as nonattainment for the 1997 annual $PM_{2.5}$ NAAQS and therefore subject to the requirements of subpart 4 and the areas that have been redesignated to attainment for the 1997 secondary annual $PM_{2.5}$ NAAQS. Accordingly, such references to historical designations of areas where the 1997 primary annual $PM_{2.5}$ NAAQS has been revoked should not be viewed as current designations under CAA section 107(d) for the 1997 primary annual $PM_{2.5}$. As additional areas are redesignated to attainment for the 1997 annual $PM_{2.5}$ NAAQS, the EPA will indicate in the redesignation rulemaking that the 1997 primary annual NAAQS is revoked on the effective date of the redesignation.

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[276] Areas that do not have adequate or approved motor vehicle emissions budgets for the 1997 annual $PM_{2.5}$ NAAQS or the 2006 24-hour $PM_{2.5}$ NAAQS would use one of the two interim emissions tests required by 40 CFR 93.109(c)(3) and 40 CFR 93.119(b).

[277] The guidance is available at: *http://www3.epa.gov/otaq/stateresources/transconf/documents/420b15091.pdf.*

[278] 78 FR 3086 (January 15, 2013).

The EPA notes that areas designated nonattainment for the 1997 annual $PM_{2.5}$ NAAQS at the time of the final rule's revocation would be required to continue to comply with applicable conformity requirements for that NAAQS. This obligation would continue until the effective date of the redesignation of such an area to attainment for the 1997 annual $PM_{2.5}$ NAAQS. Transportation and general conformity would apply in all areas that are designated nonattainment for the more health protective 2012 primary annual $PM_{2.5}$ NAAQS on April 15, 2016, the end of the conformity grace period (CAA section 176 (c)(c)(6) and 40 CFR 93.102(d)). Any areas that are also designated nonattainment or redesignated to attainment for the 1997 24-hour $PM_{2.5}$ NAAQS or the 2006 24-hour $PM_{2.5}$ NAAQS are required to continue to make conformity determinations for those NAAQS. *See* Section IX.B of this preamble for more information about conformity implementation including information pertaining to conformity requirements for the 1997 secondary annual NAAQS.

As with other NAAQS revocations, this revocation is framed in the context of the CAA requirements that apply to the NAAQS transitions to ensure that states and nonattainment areas continue to make progress and do not reverse progress, or backslide, from improvements already made in air quality. The CAA contains several provisions indicating Congressional intent not to allow a state to alter or remove provisions from an approved attainment or maintenance plan if the revision would reduce air quality protection. CAA section 193 prohibits modification of a control requirement in effect or required to be adopted as of November 15, 1990 (the date of enactment of the 1990 CAA Amendments), unless such a modification would ensure equivalent or greater emissions reductions. CAA section 172(e), which addresses relaxations of the NAAQS, requires protections for areas that have not attained the NAAQS prior to a relaxation by requiring controls which are at least as stringent as the controls applicable in nonattainment areas prior to any such relaxation. CAA Section 110(l) provides that a SIP revision cannot be approved if it will interfere with attainment or other CAA requirements. Under CAA section 175A(d), an area that is redesignated to attainment may, with an appropriate showing of no interference, cease to implement a measure that is contained in the SIP at the time of redesignation, but only if that measure is retained as a contingency measure in the area's maintenance plan.[279] [280]

The EPA has concluded that revoking the 1997 primary annual $PM_{2.5}$ NAAQS in attainment areas for that NAAQS is consistent with the CAA and precedent in transitioning from a previous NAAQS to a new, more stringent NAAQS. The approach taken in this final rule is consistent with the approach taken in the transition from the past SO_2 and lead NAAQS to the current NAAQS for those pollutants. Revoking the 1997 primary annual $PM_{2.5}$ NAAQS only in attainment areas ensures that any areas that remain designated nonattainment for the 1997 annual $PM_{2.5}$ NAAQS make progress toward attaining that NAAQS as expeditiously as practicable by implementing the CAA requirements that apply to $PM_{2.5}$ nonattainment areas as described elsewhere in this final rule.

Continued attainment of the 1997 primary annual $PM_{2.5}$ NAAQS in areas that have been redesignated to attainment for that NAAQS will be ensured through the ongoing implementation of the approved maintenance plan that applies in these areas. These areas are required to implement their approved CAA section 175A maintenance plan for the 1997 primary annual $PM_{2.5}$ NAAQS. They are also required to implement a PSD program for the annual $PM_{2.5}$ NAAQS, unless they are designated nonattainment for the 2012 primary annual $PM_{2.5}$ NAAQS where an NNSR program would apply.[281] Revisions to the approved maintenance plan can only be made if the revisions meet the requirements of CAA section 110(l) and, if applicable, CAA section 193.

Under the selected option for revocation, it is unnecessary to finalize anti-backsliding requirements that would apply to nonattainment areas for the 1997 primary annual $PM_{2.5}$ NAAQS, because the NAAQS is only being revoked in attainment areas. For former nonattainment areas that have been redesignated to attainment, the EPA has already determined through the redesignation process and approval of maintenance plans that all applicable requirements for the 1997 primary annual $PM_{2.5}$ NAAQS—including anti-backsliding requirements—have been fulfilled. For areas that were initially designated as attainment for both the 1997 annual $PM_{2.5}$ NAAQS and the 2012 primary annual $PM_{2.5}$ NAAQS, the approved PSD SIPs satisfy the obligation to submit an approvable maintenance plan for the 2012 primary annual $PM_{2.5}$ NAAQS under CAA section 110(a)(1).

The NAAQS is not being revoked in nonattainment areas. Therefore, nonattainment areas will continue to comply with the requirements applicable to their classification for the 1997 annual $PM_{2.5}$ NAAQS as described in this final rule. For example, areas classified as Serious will be required to implement BACT and BACM level controls and implement an NNSR program that meets the Serious area requirements. Any areas that do not attain by the Serious area deadline would be required to comply with other requirements including most stringent measures and a 5 percent plan. This would ensure that these areas continue to make progress toward attaining the 1997 annual $PM_{2.5}$ NAAQS and attain that NAAQS as expeditiously as practicable. It would also serve to provide early emissions reductions toward attaining the 2012 primary annual $PM_{2.5}$ NAAQS. When these areas are eligible for redesignation to attainment, they may submit a redesignation request including a maintenance plan for the 1997 primary annual $PM_{2.5}$ NAAQS as required by CAA sections 107(d)(3) and 175A. On the effective date of the approval of the redesignation request and maintenance plan, the 1997 primary annual $PM_{2.5}$ NAAQS would be revoked and the approved maintenance plan along with the implementation of a PSD program for this NAAQS, if they are designated attainment for the 2012 primary annual $PM_{2.5}$ NAAQS, would ensure continued attainment of the 1997 primary annual $PM_{2.5}$ NAAQS.[282] Revisions to the approved maintenance plan can only be made if the revisions meet the requirements of CAA section 110(l) and, if applicable, CAA section 193.

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[279] Nonattainment areas that were redesignated to attainment with an approved CAA section 175A maintenance plan are referred to throughout this document as "maintenance areas."

[280] Unimplemented requirements in the SIP or those shown to be unnecessary for maintenance can be shifted to the contingency measures portion of the SIP upon redesignation. *See* "Procedures for Processing Requests to Redesignate Areas to Attainment," Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992; "State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) National Ambient Air Quality Standards (NAAQS) On or After November 15, 1992," Memorandum from Michael H. Shapiro, Acting Assistant Administrator for Air and Radiation, September 17, 1993. As discussed elsewhere in this document, an exception is made for NNSR, which can be removed from the SIP completely and need not be retained as a contingency measure after redesignation to attainment.

[281] Areas initially designated as attainment for the 1997 annual $PM_{2.5}$ NAAQS would also be required to continue to implement a PSD program unless an area was designated nonattainment for the 2012 primary annual $PM_{2.5}$ NAAQS or the 2006 24-hour $PM_{2.5}$ NAAQS. In that case, such an area would be required to implement an NNSR program for that NAAQS.

As the EPA proposed, the areas where the NAAQS is being revoked are not required to submit a second 10-year maintenance plan for the 1997 primary annual $PM_{2.5}$ NAAQS because there is no justification for additional maintenance plan burdens to be imposed on these areas solely because at one time they were designated nonattainment under the revoked 1997 primary annual $PM_{2.5}$ NAAQS. Not requiring a second 10-year maintenance plan for these areas helps to minimize the burden associated with preparing SIPs for a succession of the NAAQS of increasing stringency. These areas are required to continue to implement their approved maintenance plans for the 1997 primary annual $PM_{2.5}$ NAAQS. The maintenance plan remains in effect beyond the end of the maintenance period. It may only be revised if the revision complies with the requirements of CAA section 110(l) and, if applicable, CAA section 193. Any areas that are designated nonattainment for the 2012 primary annual $PM_{2.5}$ NAAQS are required to comply with the applicable CAA requirements as described in this final rule.

The EPA notes that most of the 39 areas that were initially designated as nonattainment for the 1997 annual $PM_{2.5}$ NAAQS have already been redesignated to attainment (*i.e.,* they are maintenance areas) and their approved maintenance plans and PSD programs along with the CAA's anti-backsliding provisions in CAA sections 110(l) and 193 ensure continued attainment of the 1997 primary annual $PM_{2.5}$ NAAQS. If additional areas are redesignated to attainment for the 1997 primary annual $PM_{2.5}$ NAAQS, their approved maintenance plan and PSD program for the 1997 primary annual $PM_{2.5}$ NAAQS would prevent backsliding for that NAAQS. As stated previously, applicable conformity requirements would continue to apply for the 1997 annual $PM_{2.5}$ NAAQS until the effective date of the redesignation of such an area to attainment for the 1997 annual $PM_{2.5}$ NAAQS.

In addition, transportation and general conformity will apply in all areas that are designated nonattainment for the more health protective 2012 primary annual $PM_{2.5}$ NAAQS on April 15, 2016, the end of the conformity grace period (CAA section 176(c)(6) and 40 CFR 93.102(d)). In the D.C. Circuit Court's December 2006 decision in *South Coast* v. *EPA,* as modified following rehearing, the Court held with respect to the anti-backsliding approach for transportation conformity that 1-hour ozone motor vehicle emissions budgets must be used in transportation conformity determinations for the more protective 1997 ozone NAAQS where such SIP motor vehicle emissions budgets have been found adequate or approved, until SIP motor vehicle emissions budgets for the 1997 8-hour ozone NAAQS are available.[283] In addition, the Court affirmed more broadly that in order for transportation conformity determinations to fulfill the requirements of CAA section 176(c)(1), motor vehicle emissions budgets for a prior NAAQS must be used in transportation conformity determinations under a revised NAAQS until emissions budgets for the revised NAAQS are either found adequate or are approved, but that conformity determinations need not be made for a revoked standard. Therefore, areas designated nonattainment for the 2012 primary annual $PM_{2.5}$ NAAQS that have adequate or approved SIP budgets for the 1997 annual $PM_{2.5}$ NAAQS must continue to use such budgets in transportation conformity determinations until budgets for the 2012 primary annual $PM_{2.5}$ NAAQS are found adequate or are approved.[284]

With regard to general conformity, the D.C. Circuit Court did not address the need for specific anti-backsliding measures in its initial decision or in the modified decision on the *South Coast* litigation. However, general conformity determinations will be required in nonattainment areas for the 2012 primary annual NAAQS as required by CAA section 176(c)(5) to ensure that the actions of federal agencies do not cause a violation of that NAAQS, make an existing violation worse or delay timely attainment of the NAAQS or an interim milestone.

The EPA believes that revoking the 1997 primary annual $PM_{2.5}$ NAAQS is logical because it results in only one primary annual $PM_{2.5}$ NAAQS—the 2012 primary annual $PM_{2.5}$ NAAQS—applying for purposes of transportation and general conformity in most areas, on the effective date of this rulemaking, which is after the end of the 1-year conformity grace period that applies to newly designated nonattainment areas. (CAA section 176(c)(6)).

An area that is attaining the more health-protective 2012 primary annual $PM_{2.5}$ NAAQS would no longer have to expend resources to make conformity determinations or complete other applicable CAA air quality planning requirements for any of the current annual $PM_{2.5}$ NAAQS after the 1997 primary annual $PM_{2.5}$ NAAQS is revoked in the area. It should be noted that any areas that are attaining the more health protective 2012 primary annual NAAQS are also necessarily attaining the less stringent 1997 annual $PM_{2.5}$ NAAQS by a wide margin. *See* further information for how conformity will be implemented for the 2012 $PM_{2.5}$ NAAQS in Section IX.B of this preamble.

C. Comments and Responses

1. Comments on Revocation Options 1 and 2 and Not Revoking the 1997 Primary Annual $PM_{2.5}$ NAAQS

Comment: Two commenters supported Option 1 and stated that any areas that are attaining the more protective 2012 $PM_{2.5}$ NAAQS are also necessarily attaining the less stringent 1997 $PM_{2.5}$ NAAQS. Some commenters agreed that it is confusing to continue to maintain two NAAQS for the same pollutant. Two commenters stated that revocation of the 1997 NAAQS would relieve the states of the administrative burden of developing and submitting an additional maintenance plan, as well as demonstrating transportation conformity, for areas that are in compliance with the more stringent 2012 $PM_{2.5}$ NAAQS.

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[282] Areas designated nonattainment for the 2012 primary annual $PM_{2.5}$ NAAQS would implement a NNSR program for that NAAQS, instead of a PSD program for the 1997 primary annual PM.

[283] *See South Coast Air Quality Management District* v. *EPA,* 472 F.3d at 882.

[284] Such areas without adequate or approved SIP budgets for either the 1997 annual $PM_{2.5}$ NAAQS or the 2006 24-hour $PM_{2.5}$ NAAQS are required to demonstrate transportation conformity using one of the interim emissions tests depending on their classification as required by 40 CFR 93.119.

Response: The EPA is finalizing Option 1, and we agree with the commenter that:

- Any area that is attaining the more health protective 2012 primary annual $PM_{2.5}$ NAAQS of 12.0 $\mu g/m^3$ is also attaining the 1997 annual $PM_{2.5}$ NAAQS of 15.0 $\mu g/m^3$;
- revoking the 1997 primary annual NAAQS in areas that have either always been in attainment for that NAAQS or have been redesignated to attainment reduces confusion concerning implementation of the various $PM_{2.5}$ NAAQS; and
- burden on states is reduced because a second 10-year maintenance plan is not being required for the 1997 primary annual $PM_{2.5}$ NAAQS.

If the 1997 primary annual $PM_{2.5}$ NAAQS were to remain in place after CAA requirements begin to apply for the 2012 primary annual $PM_{2.5}$ NAAQS, federal agencies, metropolitan planning organizations (MPOs) and other state, local, and federal transportation and air quality agencies in areas that are currently designated nonattainment or maintenance for the 1997 annual $PM_{2.5}$ NAAQS and are now designated nonattainment for the 2012 primary annual NAAQS would be required to implement CAA requirements for both annual $PM_{2.5}$ NAAQS concurrently. Additionally, some areas would also be implementing requirements for the 2006 24-hour $PM_{2.5}$ NAAQS, and two areas remain subject to requirements for the 1997 24-hour $PM_{2.5}$ NAAQS. This could lead to unnecessary complexity for transportation conformity determinations, especially if an area's boundaries for the various $PM_{2.5}$ NAAQS differ from one another, as boundaries for several areas do, and the same test of conformity cannot be used for all the $PM_{2.5}$ NAAQS. Even where an area's boundaries are unchanged, different analysis years under the transportation conformity rule may be required for each $PM_{2.5}$ NAAQS. It could also lead to general conformity determinations being made in areas that are attainment for the 2012 primary annual $PM_{2.5}$ NAAQS. Finally, state and local air quality agencies would be required to continue attainment planning activities for the 1997 primary annual $PM_{2.5}$ NAAQS even if they had air quality data that resulted in their being designated attainment for the 2012 primary annual $PM_{2.5}$ NAAQS.

Comment: Some commenters opposed revocation of the 1997 primary annual $PM_{2.5}$ NAAQS but stated that if the EPA decides to revoke the standard, then Option 1 is preferable since it more fully complies with the health protection functions of the Act. This commenter stated that Option 2 would violate the Act by creating flexibility for regions that have failed to meet the standard. The commenter provides a number of reasons for why Option 2 should not be finalized. The commenter is primarily concerned that revoking the 1997 primary annual NAAQS in areas that are designated nonattainment for that NAAQS at the time of revocation would delay improvements in air quality and allow areas to postpone implementation of controls that apply in $PM_{2.5}$ areas that are classified as Serious. The commenter also stated that the EPA must identify specific problems to be addressed by revocation and a beneficial purpose for the revocation, and not solely on a claim of the need for flexibility. While the D.C. Circuit held that the EPA can revoke a NAAQS, the EPA cannot do so to maximize its own discretion.

Response: The EPA concluded that it is important to have all of the CAA's tools in subpart 4 and, as applicable, subpart 1 available in order to bring areas that are still violating the 1997 annual $PM_{2.5}$ NAAQS into attainment as expeditiously as practicable. Finalizing Option 1, which revokes the 1997 primary annual $PM_{2.5}$ NAAQS in attainment areas, including areas redesignated to attainment with an approved CAA section 175A maintenance plan, leaves the CAA's compliance plan for PM areas in place as Congress envisioned it. As described earlier, the EPA is finalizing Option 1 for revoking the 1997 primary annual $PM_{2.5}$ NAAQS. Under Option 1, the primary annual NAAQS is being revoked in areas that have always been attainment for the 1997 annual $PM_{2.5}$ NAAQS and in areas that have been redesignated to attainment for that NAAQS. Any area that remains designated nonattainment for the 1997 annual $PM_{2.5}$ NAAQS on the date of the revocation will have the 1997 primary annual $PM_{2.5}$ NAAQS revoked after the area attains the 1997 annual $PM_{2.5}$ NAAQS and is redesignated to attainment consistent with CAA section 107(d)(3)(E) (including the requirement to have an approved CAA section 175A maintenance plan for the primary NAAQS). This means that any area that remains designated nonattainment on the date of the revocation will remain subject to all subpart 4 requirements, including Serious area requirements such as BACT and BACM and more stringent NNSR requirements. If the area does not attain by the Serious area deadline and is not eligible for a 1-year attainment date extension, the area would become subject to the requirement to develop a 5 percent plan. If the area has still not attained, it would be subject to the requirements in CAA section 179(d) for areas that fail to attain.

The EPA agrees with the commenter's assessment that attaining the 1997 annual $PM_{2.5}$ NAAQS as expeditiously as practicable has both health and welfare benefits. The final rule ensures that attainment of the 1997 $PM_{2.5}$ NAAQS is achieved in all areas. Furthermore, the final rule also requires that progress is made toward attainment of the 2012 primary annual $PM_{2.5}$ NAAQS in nonattainment areas for that NAAQS. In addition, the 1997 annual secondary NAAQS was retained to protect against certain welfare effects. The EPA agrees that if we had revoked the 1997 primary annual $PM_{2.5}$ NAAQS in areas that are still violating that NAAQS those areas would have started over as Moderate areas for the 2012 NAAQS, rather than being required to move forward with more stringent measures that would have applied to a Serious area for the 1997 annual $PM_{2.5}$ NAAQS. The revocation of the 1997 primary annual $PM_{2.5}$ NAAQS as proposed under Option 1 and being finalized is fully consistent with principles of CAA section 172(e). The 1997 primary annual $PM_{2.5}$ NAAQS is only revoked after an area has attained that NAAQS and been redesignated to attainment with an approved CAA section 175A maintenance plan for that NAAQS. The NAAQS is not being revoked in any area that remains designated nonattainment for the NAAQS and areas that continue to violate the NAAQS continue to be required to implement all of the measures required by subpart 4 (*e.g.,* BACT, BACM and Serious area NNSR) and would be subject to additional subpart 4 requirements (*e.g.,* most stringent measures and a 5 percent plan) if the area cannot or does not attain by the Serious area deadline.

The EPA is finalizing the revocation of the 1997 primary annual $PM_{2.5}$ NAAQS only in former nonattainment areas that have been redesignated to attainment. Areas that continue to violate the 1997 annual NAAQS must attain that NAAQS and be redesignated to attainment with an approved CAA section 175A maintenance plan for the 1997 primary annual $PM_{2.5}$ NAAQS. The nonattainment areas where the

NAAQS is not being revoked will be required to comply with all subpart 4 requirements in order to bring them into attainment with the 1997 annual $PM_{2.5}$ NAAQS as expeditiously as practicable. In sum, the final rule requires CAA subpart 4 to be implemented in all nonattainment areas for the 1997 primary annual $PM_{2.5}$ NAAQS.

The EPA also disagrees with the commenter's assertion that the final rule changes CAA subpart 4's requirements. Revocation under Option 1 requires that nonattainment areas attain the 1997 annual $PM_{2.5}$ NAAQS and be redesignated to attainment before that NAAQS is revoked. Any area that remains nonattainment and continues to violate the 1997 annual NAAQS must first attain that NAAQS by complying with the requirements for subpart 4 and then be redesignated to attainment with an approved maintenance plan for the 1997 primary annual $PM_{2.5}$ NAAQS as described earlier.

The EPA has concluded that the final rule fully complies with CAA requirements and is consistent with both past precedents for revoking the original SO_2 and lead NAAQS and the tenets of the *South Coast* decision concerning revocation of the 1-hour ozone NAAQS. (*South Coast Air Quality Management Dist.* v. *EPA,* 472 F.3d 882) Areas that continue to violate the 1997 annual NAAQS at the time of the initial revocation are required to attain that NAAQS as expeditiously as practicable through implementation of requirements in subpart 4. This will ensure that these areas continue to make progress toward and eventually attain the 1997 annual NAAQS and make progress toward expeditious attainment of the more health protective 2012 primary annual $PM_{2.5}$ NAAQS.

With regard to the comment that the EPA needs a better rationale for the revocation, the EPA is revoking the 1997 primary annual $PM_{2.5}$ NAAQS in areas that have always been attainment for that NAAQS and in areas that were initially designated nonattainment but have been redesignated to attainment for that NAAQS because this action ensures that only one primary annual $PM_{2.5}$ NAAQS—the more protective 2012 primary annual $PM_{2.5}$ NAAQS—applies in areas that are designated as attainment for the 1997 annual $PM_{2.5}$ NAAQS. These areas have successfully attained the less stringent 1997 annual $PM_{2.5}$ NAAQS and have a maintenance plan in place to ensure that they do not slip back into nonattainment for that NAAQS. These areas can only revise their approved maintenance plans if the revision complies with CAA section 110(l) and, if applicable, CAA section 193. Any of these areas that are designated nonattainment for the more health protective 2012 primary annual $PM_{2.5}$ NAAQS can now focus their efforts on expeditiously attaining the more protective NAAQS as required under subpart 4. Any of these areas that are designated attainment for the more health protective 2012 primary annual $PM_{2.5}$ NAAQS can focus their resources on other pressing air quality issues.

The EPA believes that appropriately integrating prior requirements with new goals facilitates coherent, effective and timely planning and controls, and minimizes the separate potentially duplicative submission of requirements left over from previous standards. Expeditious attainment of the 1997 annual $PM_{2.5}$ NAAQS in nonattainment areas provides both health and welfare benefits that should not be delayed by allowing nonattainment areas to restart the $PM_{2.5}$ planning process under the Moderate area classification in subpart 4 for areas that are designated nonattainment for the more health protective 2012 primary annual $PM_{2.5}$ NAAQS. For these reasons and the reasons stated earlier in Section X.a of this preamble, the EPA believes that the revocation of the 1997 primary annual $PM_{2.5}$ NAAQS in areas that have always been attainment for that NAAQS and in areas that have been redesignated to attainment for that NAAQS provides the appropriate way to move toward attaining the more protective standard in a timely and effective manner. This approach ensures that progress made under previous $PM_{2.5}$ NAAQS continues in attainment areas and continues in nonattainment areas.

Comment: Other commenters stated that it causes unnecessary complexity, confusion, and burden to have multiple national standards for the same criteria pollutant. The commenter stated that any concerns about states and nonattainment areas not continuing to make progress or reversing progress can be mitigated through anti-backsliding requirements. On the other hand, two commenters supported the option of not revoking the standard at all. One of these commenters believed that past experience has led to confusion and litigation and has diminished the urgency to attain a new NAAQS.

Response: As described earlier, the EPA is finalizing revocation Option 1, which leaves the nonattainment designation in place until the area is redesignated to attainment and for those areas to fulfill the requirements of CAA subpart 4 that apply to them. Revoking the 1997 primary annual $PM_{2.5}$ NAAQS in areas that were designated nonattainment at the time of the revocation could delay attainment of that NAAQS and slow progress on attaining the 2012 primary annual $PM_{2.5}$ NAAQS because such areas would not be subject to all of the planning requirements in CAA subpart 4 after the date of the revocation. The EPA believes that the final rule simplifies the revocation because the approved maintenance plan and an area's PSD program serve to prevent backsliding. Anti-backsliding measures are not required for nonattainment areas because the NAAQS is not being revoked in nonattainment areas.

Comment: Several commenters supported Option 2 and stated that it is consistent with implementation rules for the other NAAQS, the 2012 primary annual $PM_{2.5}$ NAAQS is more stringent and more protective of health than the 1997 primary annual $PM_{2.5}$ standard, and revocation of the 1997 $PM_{2.5}$ NAAQS would reduce the burden on states. One of these commenters also stated that, in 1997 $PM_{2.5}$ NAAQS maintenance areas that have good $PM_{2.5}$ air quality, revoking the 1997 $PM_{2.5}$ NAAQS in its entirety will alleviate transportation conformity requirements as well as requirements for the submission of additional maintenance plans.

Response: As discussed in the proposal, the revocations of the prior lead and SO_2 NAAQS were accomplished in a manner consistent with Option 1. (80 FR 15340) The EPA notes that both Options 1 and 2 would reduce burden on the states. Under Option 1, areas that are redesignated to attainment would not be required to submit a second 10-year maintenance plan. However, under Option 1, areas that are designated nonattainment at the time of the revocation would remain subject to the CAA subpart 4 requirements applicable to the area until it attains the NAAQS and is redesignated to attainment through approval of a redesignation request and a CAA section 175A maintenance plan for the primary NAAQS. Under Option 2, areas that remain designated nonattainment at the time of the revocation would be required to implement their approved SIPs for the 1997 annual $PM_{2.5}$ NAAQS but would not be susceptible to a reclassification from Moderate to Serious, and thus would not be required to adopt additional subpart 4 requirements including requirements for Serious areas that would apply if such an area were reclassified. Not requiring Serious area measures in such an area would delay emissions reductions and improvements in air quality.

The EPA also notes it retained the 1997 secondary annual NAAQS when the $PM_{2.5}$ NAAQS was revised in December 2012, thus, full revocation of the 1997 standard would not be appropriate.

Comment: Two commenters opposed the possible approach of not revoking the 1997 primary annual $PM_{2.5}$ NAAQS at this time because it would be inconsistent with past actions when a NAAQS has been replaced by the more stringent NAAQS and because it presents an unnecessary burden.

Response: The EPA is finalizing the proposed revocation of the 1997 primary annual $PM_{2.5}$ NAAQS for the reasons set forth earlier.

2. Comments on Anti-Backsliding Requirements Under Option 1

Comment: Some commenters expressed concern that the proposal that an approved CAA section 175A maintenance plan would serve as the anti-backsliding measures may not be consistent with the language of CAA section 172(e).

Response: The EPA disagrees with the commenter. CAA section 172(e) applies in areas that have not attained the prior NAAQS. In this final rule, the EPA is only revoking the 1997 primary annual $PM_{2.5}$ NAAQS in areas that have attained that NAAQS and been redesignated to attainment with an approved CAA section 175A maintenance plan. The EPA has determined that implementing the approved maintenance plan along with a PSD program will serve to prevent backsliding in the areas where the NAAQS is being revoked. The approved maintenance plan can only be revised if the revision meets the requirements of CAA section 110(l) and, if applicable, CAA section 193. In order for the 1997 primary annual $PM_{2.5}$ NAAQS to be revoked in the future in an area that remains designated nonattainment at the time of the initial revocation, such an area would have to attain the NAAQS, submit a redesignation request including a maintenance plan for the primary NAAQS, and the EPA would have to approve that submission. The 1997 primary annual $PM_{2.5}$ NAAQS would then be revoked in such an area on the effective date of the approval of the redesignation and maintenance plan. That approved maintenance plan would serve to prevent backsliding.

Comment: Some commenters questioned whether the EPA's conclusion is correct that under Option 1 there is no need for anti-backsliding measures, because the area would have already attained. Commenter stated there may be no need for implementing additional measures, but it seems the state should continue to keep in effect those measures that have brought it to attainment (except NNSR which by statute is replaced by PSD permitting).

Response: The final rule addresses this comment. Former nonattainment areas where the 1997 primary annual $PM_{2.5}$ NAAQS is being revoked are required to implement the approved maintenance plan for that NAAQS and to implement a PSD program. The approved maintenance plan remains in effect beyond the end of the maintenance period. The approved maintenance plan can only be revised if the revision complies with CAA section 110(l) and, if applicable, CAA section 193.

XI. Environmental Justice Considerations

The EPA believes the human health or environmental risk addressed by this action will not have disproportionately high and adverse human health or environmental effects on minority, low-income, or indigenous populations because it would not negatively affect the level of protection provided to human health or the environment under the $PM_{2.5}$ NAAQS. When promulgated, these regulations will clarify the state implementation plan requirements and the NNSR permitting requirements to be met by states in order to attain the $PM_{2.5}$ NAAQS as expeditiously as practicable. These requirements are designed to protect all segments of the general population. The EPA included specific discussion in this preamble about actions that could be considered for the protection of minority, low-income or indigenous populations in Section IV.D.6 of this preamble on Moderate area attainment plan control strategies; Section VI.D.7 on Serious area attainment plan control strategies; and Section IX.G of this preamble, measures to ensure appropriate protections for overburdened populations. In addition, as part of the consultation activities conducted in developing this rule, the EPA participated in training and outreach activities with representatives from environmental justice organizations in a March 2014 conference held in Research Triangle Park, NC titled, "Clean Air Act Rulemaking and Permitting Training for EJ Communities." These proposed regulations are designed to protect and enhance the health and safety of these and other populations, and they will not adversely affect the health or safety of minority, low-income or indigenous populations.

XII. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review because it raises novel policy issues. Any changes made in response to OMB recommendations have been documented in the docket.[285]

B. Paperwork Reduction Act (PRA)

The information collection activities in this rule have been submitted to the Office of Management and Budget (OMB) under the PRA. The Information Collection Request (ICR) document prepared by the EPA has been assigned the EPA ICR number 2258.04, OMB Control No. 2060–0611. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

The EPA is finalizing this $PM_{2.5}$ NAAQS SIP Requirements Rule to describe the CAA requirements that must be met by states with nonattainment areas required to develop attainment plans for attaining and maintaining the NAAQS. The intended effect of the SIP Requirements Rule is to provide certainty to states regarding their planning obligations such that states may begin SIP development. Only states with nonattainment areas are required to submit SIPs under this rule.

For purposes of analysis of the estimated paperwork burden, the EPA assumed there were 14 existing nonattainment areas for the 1997and 2006 $PM_{2.5}$ NAAQS, and 14 designated nonattainment areas.[286] The attainment plan requirements would appear as 40 CFR 51.1000 through 51.1015 which implement CAA subsections 172(c)(1) and (2), and 189(a)(1)(B) and (C), 189(b)(1)(A) and (B) and 189(c). Some states have new nonattainment areas and some states should already have information from emission sources, as facilities should have provided this information to meet 1997 and 2006

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[285] Note that a regulatory impact analysis evaluating the costs and benefits associated with attaining the 2012 $PM_{2.5}$ NAAQS was released at the time the NAAQS review was finalized. *See* "Regulatory Impact Analysis for the Final Revisions to the National Ambient Air Quality Standards for Particulate Matter." U.S. Environmental Protection Agency, Office of Air Quality and Planning Standards, Health and Environmental Impacts Division, February 28, 2013. EPA–452/R–12–005.

[286] On December 18, 2014, the EPA issued final area designations for the 2012 annual national air quality standard for fine particulate matter ($PM_{2.5}$). The EPA designated 14 areas in six states as "nonattainment." The effective date was April 15, 2015.

$PM_{2.5}$ NAAQS SIP requirements, operating permits and/or emissions reporting requirements. Such information does not generally reveal the details of production processes. But, to the extent it may, confidential business information for the affected facilities is protected. Specifically, submissions of emissions and control efficiency information that is confidential, proprietary and trade secret and is not emission data are protected from disclosure under the requirements of subsections 503(e) and 114(c) of the CAA.

The annual state burden for this information collection for the 14 designated 2012 $PM_{2.5}$ nonattainment areas, averaged over the first 3 years of this ICR, is estimated to be a total of 42,000 labor hours per year at an annual a labor cost of $2.5 million (present value) over the 3 year period, or approximately $420,000 per state for the 6 state respondents. The average annual reporting burden is approximately 2,625 hours per response, with approximately 3 responses per state for 16 state responses. There are no capital or operating and maintenance costs associated with the proposal requirements. Burden is defined at 5 CFR 1320.3(b).

The annual state burden for this information collection for the 14 existing nonattainment areas for the 1997 and 2006 $PM_{2.5}$ NAAQS, averaged over the first 3 years of this ICR, is estimated to be a total of 48,600 labor hours per year at an annual labor cost of $2.9 million (present value) over the 3 year period, or approximately $417,000 per state for the 7 state respondents. The average annual reporting burden is approximately 3,240 hours per response, with approximately two responses per state for 15 state responses. There are no capital or operating and maintenance costs associated with the proposal requirements. Burden is defined at 5 CFR 1320.3(b).

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden or otherwise has a positive economic effect on the small entities subject to the rule. This rule will not impose any requirements directly on small entities. Entities potentially affected directly by this final rule include state, local and tribal governments and none of these governments are small governments. Other types of small entities are not directly subject to the requirements of this rule.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. This action imposes no enforceable duty on any state, local or tribal governments or the private sector. The CAA imposes the obligation for states to submit attainment plans to implement the $PM_{2.5}$ NAAQS. In this rule, the EPA is clarifying those requirements. Therefore, this action is not subject to the requirements of sections 202, 203, and 205 of the UMRA.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This final rule does not have tribal implications. It would not have a substantial direct effect on one or more Indian tribes. Furthermore, these regulation revisions do not affect the relationship or distribution of power and responsibilities between the federal government and Indian tribes. The CAA and the TAR establish the relationship of the federal government and tribes in characterizing air quality and developing plans to attain the NAAQS, and these revisions to the regulations do nothing to modify that relationship. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of "covered regulatory action" in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because it implements a previously promulgated health or safety-based federal standard established pursuant to the CAA.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not a "significant energy action" as defined in Executive Order 13211 (66 FR 28355 (May 22, 2001)), because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

I. National Technology Transfer and Advancement Act

This rulemaking does not involve technical standards.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes the human health or environmental risk addressed by this action will not have disproportionately high and adverse human health or environmental effects on minority, low-income, or indigenous populations. The results of this evaluation are contained in Section XI of this preamble. However, because of the benefits of improved air quality on low SES populations, the EPA conducted outreach to communities on the proposal to encourage comment including a March 2014 environmental justice conference in Research Triangle Park, NC, conference calls and a meeting with the National Environmental Justice Advisory Committee.

K. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

L. Determination Under Section 307(d)

Pursuant to sections 307(d)(1)(E) and 307(d)(1)(V) of the CAA, the Administrator proposes to determine that this action is subject to the provisions of section 307(d). Under section 307(d)(1)(V), the provisions of section 307(d) apply to "such other actions as the Administrator may determine.''

M. Judicial Review

Section 307(b)(1) of the CAA indicates which Federal Courts of Appeal have venue for petitions of review of final agency actions by the EPA under the CAA. This section provides, in part, that petitions for review must be filed in the U.S. Court of Appeals for the District of Columbia Circuit (i) when the agency action consists of ''nationally applicable regulations promulgated, or final actions taken, by the Administrator'' or (ii) when such action is locally or regionally applicable, if ''such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination.''

This rule implementing the $PM_{2.5}$ SIP Requirements is ''nationally applicable'' within the meaning of CAA section 307(b)(1). First, the rulemaking addresses the NAAQS that applies to all states and territories in the U.S. Second, the rulemaking addresses issues relevant to specific existing SIP provisions in states across the U.S. that are located in each of the ten EPA regions, numerous federal circuits and multiple time zones. Third, the rulemaking addresses a common core of knowledge and analysis involved in formulating the decision and a common interpretation of the requirements of the CAA being applied to SIPs in states across the country. Fourth, the rulemaking, by addressing issues relevant to appropriate SIP provisions in one state, may have precedential impacts upon the SIPs of other states nationwide. Courts have found similar rulemaking actions to be of nationwide scope and effect.[287]

Under section 307(b)(1) of the Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the District of Columbia Circuit by October 24, 2016. Any such judicial review is limited to only those objections that are raised with reasonable specificity in timely comments. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed and shall not postpone the effectiveness of such rule or action. Under section 307(b)(2) of the Act, the requirements of this final action may not be challenged later in civil or criminal proceedings brought by us to enforce these requirements.

XIII. Statutory Authority

The statutory authority for this action is provided by 42 U.S.C. 7403, 7407, 7410, and 7601.

List of Subjects

40 CFR Part 50

Environmental protection, Air pollution control, Intergovernmental relations, Particulate matter, Sulfur dioxide, Nitrogen oxides, Volatile organic compounds, Ammonia.

40 CFR Part 51

Environmental protection, Air pollution control, Intergovernmental relations, Particulate matter, Sulfur dioxide, Nitrogen oxides, Volatile organic compounds, Ammonia.

40 CFR Part 93

Environmental protection, Air pollution control, Intergovernmental relations, Particulate matter, Sulfur dioxide, Nitrogen oxides, Volatile organic compounds, Ammonia.

Dated: July 29, 2016.

Gina McCarthy,

Administrator.

For the reasons stated in the preamble, Title 40, Chapter I of the Code of Federal Regulations is amended as follows:

PART 50—NATIONAL PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS

■ 1. The authority citation for part 50 continues to read as follows:

Authority: 42 U.S.C. 7401, *et seq.*

■ 2. In § 50.13, add paragraph (d) to read as follows:

§ 50.13 National primary and secondary ambient air quality standards for $PM_{2.5}$.

* * * * *

(d) Until the effective date of the final Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements rule to be codified at 40 CFR 51.1000 through 51.1016, the 1997 annual $PM_{2.5}$ NAAQS set forth in this section will continue in effect, notwithstanding the promulgation of the 2012 primary annual $PM_{2.5}$ NAAQS under § 50.18. The 1997 primary annual $PM_{2.5}$ NAAQS set forth in this section will no longer apply upon the effective date of the final Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements rule; except that for areas designated nonattainment for the 1997 annual $PM_{2.5}$ NAAQS set forth in this section as of the effective date of the final Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements rule, the requirements applicable to the 1997 primary annual $PM_{2.5}$ NAAQS set forth in this section will apply until the effective date of an area's redesignation to attainment for the 1997 annual $PM_{2.5}$ NAAQS pursuant to the requirements of section 107 of the Clean Air Act. The 1997 secondary annual $PM_{2.5}$ NAAQS and the 1997 24-hour $PM_{2.5}$ NAAQS shall remain in effect. The area designations and classifications with respect to the 1997 annual and 24-hour $PM_{2.5}$ NAAQS remain codified in 40 CFR part 81 in order to provide information on where the 1997 primary annual $PM_{2.5}$ NAAQS has been revoked and to facilitate the implementation of the 1997 secondary annual $PM_{2.5}$ NAAQS and the 1997 24-hour $PM_{2.5}$ NAAQS.

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

■ 3. The authority citation for part 51 continues to read as follows:

Authority: 23 U.S.C. 101; 42 U.S.C. 7401–7671q.

■ 4. In Appendix A to subpart A of part 51, revise table 1 to read as follows:

Appendix A to Subpart A of Part 51—Tables

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[287] *See, e.g., State of Texas, et al.* v. *EPA,* 2011 U.S. App. LEXIS 5654 (5th Cir. 2011) (finding SIP call to 13 states to be of nationwide scope and effect and thus transferring the case to the U.S. Court of Appeals for the D.C. Circuit in accordance with CAA section 307(b)(1)).

TABLE 1 TO APPENDIX A OF SUBPART A—EMISSION THRESHOLDS[1] BY POLLUTANT FOR TREATMENT AS POINT SOURCE UNDER 40 CFR 51.30

Pollutant	Every-year	Triennial	
	Type A sources[2]	Type B sources	NAA sources[3]
(1) SO_2	≥2500	≥100	≥100. $PM_{2.5}$ (serious) ≥70.
(2) VOC	≥250	≥100	≥100. O_3 (serious) ≥50. O_3 (severe) ≥25. O_3 (extreme) ≥10. $PM_{2.5}$ (serious) ≥70.
(3) NO_X	≥2500	≥100	≥100. $PM_{2.5}$ (serious) ≥70.
(4) CO	≥2500	≥1000	O_3 (all areas) ≥100. CO (all areas) ≥100.
(5) Lead		≥0.5 (actual)	≥0.5 (actual).
(6) Primary PM_{10}	≥250	≥100	≥100. PM_{10} (serious) ≥70.
(7) Primary $PM_{2.5}$	≥250	≥100	≥100. $PM_{2.5}$ (serious) ≥70.
(8) NH_3	≥250	≥100	≥100. $PM_{2.5}$ (serious) ≥70.

[1] Thresholds for point source determination shown in tons per year of potential to emit as defined in 40 CFR part 70, with the exception of lead. Reported emissions should be in actual tons emitted for the required time period.

[2] Type A sources are a subset of the Type B sources and are the larger emitting sources by pollutant.

[3] NAA = Nonattainment Area. The point source reporting thresholds vary by attainment status for SO_2, VOC, NO_X, CO, PM_{10}, $PM_{2.5}$, and NH_3.

* * * * *

Subpart I—Review of New Sources and Modifications

■ 5. In § 51.165:
■ a. Revise paragraphs (a)(1)(iv)(A)(*1*) and (a)(1)(x)(A);
■ b. Add paragraph (a)(1)(x)(F);
■ c. Revise paragraph (a)(1)(xxxvii)(C)(*2*);
■ d. Remove paragraphs (a)(1)(xxxvii)(C)(*3*), and (*4*);
■ e. Revise paragraphs (a)(2)(i) and (a)(2)(ii)(A); and
■ f. Add paragraph (a)(13).

The revisions and additions read as follows:

§ 51.165 Permit requirements.

(a) * * *

(1) * * *

(iv)(A) * * *

(*1*) Any stationary source of air pollutants that emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant (as defined in paragraph (a)(1)(xxxvii) of this section), except that lower emissions thresholds shall apply in areas subject to subpart 2, subpart 3, or subpart 4 of part D, title I of the Act, according to paragraphs (a)(1)(iv)(A)(*1*)(*i*) through (*viii*) of this section.

(*i*) 50 tons per year of Volatile organic compounds in any serious ozone nonattainment area.

(*ii*) 50 tons per year of Volatile organic compounds in an area within an ozone transport region, except for any severe or extreme ozone nonattainment area.

(*iii*) 25 tons per year of Volatile organic compounds in any severe ozone nonattainment area.

(*iv*) 10 tons per year of Volatile organic compounds in any extreme ozone nonattainment area.

(*v*) 50 tons per year of Carbon monoxide in any serious nonattainment area for carbon monoxide, where stationary sources contribute significantly to Carbon monoxide levels in the area (as determined under rules issued by the Administrator).

(*vi*) 70 tons per year of PM_{10} in any serious nonattainment area for PM_{10}.

(*vii*) 70 tons per year of $PM_{2.5}$ in any serious nonattainment area for $PM_{2.5}$.

(*viii*) 70 tons per year of any individual precursor for $PM_{2.5}$ (as defined in paragraph (a)(1)(xxxvii) of this section), in any serious nonattainment area for $PM_{2.5}$.

* * * * *

(x)(A) *Significant* means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant Emission Rate

Carbon monoxide: 100 tons per year (tpy)
Nitrogen oxides: 40 tpy
Sulfur dioxide: 40 tpy
Ozone: 40 tpy of Volatile organic compounds or Nitrogen oxides
Lead: 0.6 tpy
PM_{10}: 15 tpy
$PM_{2.5}$: 10 tpy of direct $PM_{2.5}$ emissions; 40 tpy of Sulfur dioxide emissions, 40 tpy of Nitrogen oxide emissions, or 40 tpy of VOC emissions, to the extent that any such pollutant is defined as a precursor for $PM_{2.5}$ in paragraph (a)(1)(xxxvii) of this section.

* * * * *

(F) For the purposes of applying the requirements of paragraph (a)(13) of this section to modifications at existing major stationary sources of Ammonia located in a $PM_{2.5}$ nonattainment area, if the plan requires that the control requirements of this section apply to major stationary sources and major modifications of Ammonia as a regulated NSR pollutant (as a $PM_{2.5}$ precursor), the plan shall also define "significant" for Ammonia for that area, subject to the approval of the Administrator.

* * * * *

(xxxvii) * * *

(C) * * *

(*2*) Sulfur dioxide, Nitrogen oxides, Volatile organic compounds and Ammonia are precursors to $PM_{2.5}$ in any $PM_{2.5}$ nonattainment area.

* * * * *

(2) *Applicability procedures.* (i) Each plan shall adopt a preconstruction review program to satisfy the requirements of sections 172(c)(5) and 173 of the Act for any area designated nonattainment for any national ambient air quality standard under subpart C of

40 CFR part 81. Such a program shall apply to any new major stationary source or major modification that is major for the pollutant for which the area is designated nonattainment under section 107(d)(1)(A)(i) of the Act, if the stationary source or modification would locate anywhere in the designated nonattainment area. Different pollutants, including individual precursors, are not summed to determine applicability of a major stationary source or major modification.

(ii) * * *

(A) Except as otherwise provided in paragraphs (a)(2)(iii) and (iv) of this section, and consistent with the definition of major modification contained in paragraph (a)(1)(v)(A) of this section, a project is a major modification for a regulated NSR pollutant (as defined in paragraph (a)(1)(xxxvii) of this section) if it causes two types of emissions increases—a significant emissions increase (as defined in paragraph (a)(1)(xxvii) of this section), and a significant net emissions increase (as defined in paragraphs (a)(1)(vi) and (x) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

* * * * *

(13) The plan shall require that the control requirements of this section applicable to major stationary sources and major modifications of $PM_{2.5}$ shall also apply to major stationary sources and major modifications of $PM_{2.5}$ precursors in a $PM_{2.5}$ nonattainment area, except that a reviewing authority may exempt new major stationary sources and major modifications of a particular precursor from the requirements of this section for $PM_{2.5}$ if the NNSR precursor demonstration submitted to and approved by the Administrator shows that such sources do not contribute significantly to $PM_{2.5}$ levels that exceed the standard in the area. Any demonstration submitted for the Administrator's review must meet the conditions for a NNSR precursor demonstration as set forth in § 51.1006(a)(3).

* * * * *

■ 6. Revise subpart Z to read as follows:

Subpart Z—Provisions for Implementation of $PM_{2.5}$ National Ambient Air Quality Standards

Sec.

51.1000 Definitions.
51.1001 Applicability of part 51.
51.1002 Classifications and reclassifications.
51.1003 Attainment plan due dates and submission requirements.
51.1004 Attainment dates.
51.1005 Attainment date extensions.
51.1006 Optional $PM_{2.5}$ precursor demonstrations.
51.1007 [Reserved]
51.1008 Emissions inventory requirements.
51.1009 Moderate area attainment plan control strategy requirements.
51.1010 Serious area attainment plan control strategy requirements.
51.1011 Attainment demonstration and modeling requirements.
51.1012 Reasonable further progress (RFP) requirements.
51.1013 Quantitative milestone requirements.
51.1014 Contingency measures requirements.
51.1015 Clean data requirements.
51.1016 Continued applicability of the FIP and SIP requirements pertaining to interstate transport under CAA section 110(a)(2)(D)(i) and (ii) after revocation of the 1997 primary annual $PM_{2.5}$ NAAQS.

Subpart Z—Provisions for Implementation of $PM_{2.5}$ National Ambient Air Quality Standards

§ 51.1000 Definitions.

The following definitions apply for purposes of this subpart. Any term not defined herein shall have the meaning as defined in 40 CFR 51.100 or Clean Air Act section 302.

Act means the Clean Air Act as codified at 42 U.S.C. 7401–7671q (2003).

Additional feasible measure is any control measure that otherwise meets the definition of "best available control measure" (BACM) but can only be implemented in whole or in part beginning 4 years after the date of reclassification of an area as Serious and no later than the statutory attainment date for the area.

Additional reasonable measure is any control measure that otherwise meets the definition of "reasonably available control measure" (RACM) but can only be implemented in whole or in part during the period beginning 4 years after the effective date of designation of a nonattainment area and no later than the end of the sixth calendar year following the effective date of designation of the area.

Applicable annual standard is the annual $PM_{2.5}$ NAAQS established, revised, or retained as a result of a particular $PM_{2.5}$ NAAQS review.

Applicable attainment date means the latest statutory date by which an area is required to attain a particular $PM_{2.5}$ NAAQS, unless the EPA has approved an attainment plan for the area to attain such NAAQS, in which case the applicable attainment date is the date approved under such attainment plan. If the EPA grants an extension of an approved attainment date, then the applicable attainment date for the area shall be the extended date.

Applicable 24-hour standard is the 24-hour $PM_{2.5}$ NAAQS established, revised, or retained as a result of a particular $PM_{2.5}$ NAAQS review.

Attainment projected inventory for the nonattainment area means the projected emissions of direct $PM_{2.5}$ and all $PM_{2.5}$ precursors on the projected attainment date for the area. This projected inventory includes sources included in the base year inventory for the nonattainment area revised to account for changes in direct $PM_{2.5}$ and all $PM_{2.5}$ precursors through implementation of the plan and any additional sources of such emissions expected within the boundaries of the nonattainment area by the projected attainment date for the area.

Average-season-day emissions means the sum of all emissions during the applicable season divided by the number of days in that season.

Base year inventory for the nonattainment area means the actual emissions of direct $PM_{2.5}$ and all $PM_{2.5}$ precursors from all sources within the boundaries of a nonattainment area in one of the 3 years used for purposes of designations or another technically appropriate year.

Best available control measure (BACM) is any technologically and economically feasible control measure that can be implemented in whole or in part within 4 years after the date of reclassification of a Moderate $PM_{2.5}$ nonattainment area to Serious and that generally can achieve greater permanent and enforceable emissions reductions in direct $PM_{2.5}$ emissions and/or emissions of $PM_{2.5}$ plan precursors from sources in the area than can be achieved through the implementation of RACM on the same source(s). BACM includes best available control technology (BACT).

Date of designation means the effective date of a $PM_{2.5}$ area designation as promulgated by the Administrator.

Date of reclassification means the effective date of a $PM_{2.5}$ area reclassification from Moderate to Serious as promulgated by the Administrator.

Direct $PM_{2.5}$ emissions means solid or liquid particles emitted directly from an air emissions source or activity, or reaction products of gases emitted directly from an air emissions source or activity which form particulate matter as they reach ambient temperatures. Direct $PM_{2.5}$ emissions include filterable and condensable $PM_{2.5}$ emissions composed of elemental carbon, directly emitted organic carbon, directly emitted sulfate, directly emitted nitrate, and other organic or inorganic particles that exist or form through reactions as emissions reach ambient temperatures (including but not limited to crustal material, metals, and sea salt).

Implemented means adopted by the state, fully approved into the SIP by the EPA, and requiring expeditious compliance by affected sources with installation and/or operation of any equipment, control device, process change, or other emission reduction activity.

Major stationary source means any stationary source of air pollutant(s) that emits, or has the potential to emit 100 tons per year or more of direct $PM_{2.5}$ or any $PM_{2.5}$ precursor in any Moderate nonattainment area for the $PM_{2.5}$ NAAQS, or 70 tons per year or more of direct $PM_{2.5}$ or any $PM_{2.5}$ precursor in any Serious nonattainment area for the $PM_{2.5}$ NAAQS.

Mobile source means mobile sources as defined by 40 CFR 51.50.

Most stringent measure (MSM) is any permanent and enforceable control measure that achieves the most stringent emissions reductions in direct $PM_{2.5}$ emissions and/or emissions of $PM_{2.5}$ plan precursors from among those control measures which are either included in the SIP for any other NAAQS, or have been achieved in practice in any state, and that can feasibly be implemented in the relevant $PM_{2.5}$ NAAQS nonattainment area.

Nonpoint source means nonpoint sources as defined by 40 CFR 51.50.

$PM_{2.5}$ design value (DV) for a $PM_{2.5}$ nonattainment area is the highest of the 3-year average concentrations calculated for the ambient air quality monitors in the area, in accordance with 40 CFR part 50, appendix N.

$PM_{2.5}$ NAAQS are the fine particulate matter National Ambient Air Quality Standards codified at 40 CFR part 50.

$PM_{2.5}$ plan precursors are those $PM_{2.5}$ precursors required to be regulated in the applicable attainment plan and/or NNSR program.

$PM_{2.5}$ precursors are Sulfur dioxide (SO_2), Oxides of nitrogen (NO_X), Volatile organic compounds (VOC), and Ammonia (NH_3).

Point source means point sources as defined by 40 CFR 51.50.

Precursor demonstration means an optional set of analyses provided by a state that are designed to show that emissions of a particular $PM_{2.5}$ precursor do not contribute significantly to $PM_{2.5}$ levels that exceed the relevant $PM_{2.5}$ standard in a particular nonattainment area. The three types of precursor demonstrations provided in this rule are the comprehensive precursor demonstration, the major stationary source precursor demonstration, and the NNSR precursor demonstration.

Reasonable further progress (RFP) means such annual incremental reductions in emissions of direct $PM_{2.5}$ and $PM_{2.5}$ plan precursors as are required for the purpose of ensuring attainment of the applicable $PM_{2.5}$ NAAQS in a nonattainment area by the applicable attainment date.

Reasonably available control measure (RACM) is any technologically and economically feasible measure that can be implemented in whole or in part within 4 years after the effective date of designation of a $PM_{2.5}$ nonattainment area and that achieves permanent and enforceable reductions in direct $PM_{2.5}$ emissions and/or $PM_{2.5}$ plan precursor emissions from sources in the area. RACM includes reasonably available control technology (RACT).

RFP projected emissions means the estimated emissions for direct $PM_{2.5}$ and $PM_{2.5}$ plan precursors by source category or subcategory for the years in which quantitative milestones are due for a nonattainment area.

Subpart 1 means subpart 1 of part D of title I of the Act.

Subpart 4 means subpart 4 of part D of title I of the Act.

§ 51.1001 Applicability of part 51.

The provisions in subparts A through X of this part apply to areas for purposes of the $PM_{2.5}$ NAAQS to the extent they are not inconsistent with the provisions of this subpart.

§ 51.1002 Classifications and reclassifications.

(a) *Initial classification as Moderate $PM_{2.5}$ nonattainment area.* Any area designated nonattainment for a $PM_{2.5}$ NAAQS shall be classified at the time of such designation, by operation of law, as a Moderate $PM_{2.5}$ nonattainment area.

(b) *Reclassification as Serious $PM_{2.5}$ nonattainment area.* A Moderate nonattainment area shall be reclassified to Serious under the following circumstances:

(1) The EPA shall reclassify as Serious through notice-and-comment rulemaking any Moderate $PM_{2.5}$ nonattainment area that the EPA determines cannot practicably attain a particular $PM_{2.5}$ NAAQS by the applicable Moderate area attainment date.

(2) A Moderate $PM_{2.5}$ nonattainment area shall be reclassified by operation of law as a Serious nonattainment area if the EPA finds through notice-and-comment rulemaking that the area failed to attain a particular $PM_{2.5}$ NAAQS by the applicable Moderate area attainment date.

§ 51.1003 Attainment plan due dates and submission requirements.

(a) *Nonattainment areas initially classified as Moderate.* (1) For any area designated as nonattainment and initially classified as Moderate for a $PM_{2.5}$ NAAQS, the state(s) shall submit a Moderate area attainment plan that meets all of the following requirements:

(i) Base year emissions inventory requirements set forth at § 51.1008(a)(1);

(ii) Attainment projected emissions inventory requirements set forth at § 51.1008(a)(2);

(iii) Moderate area attainment plan control strategy requirements set forth at § 51.1009;

(iv) Attainment demonstration and modeling requirements set forth at § 51.1011;

(v) Reasonable Further Progress (RFP) requirements set forth at § 51.1012;

(vi) Quantitative milestone requirements set forth at § 51.1013;

(vii) Contingency measure requirements set forth at § 51.1014; and,

(viii) Nonattainment new source review plan requirements pursuant to § 51.165.

(2) The state(s) shall submit its Moderate area attainment plan to the EPA no later than 18 months from the effective date of designation of the area.

(b) *Nonattainment areas reclassified to Serious.* (1) For any nonattainment area reclassified to Serious for a $PM_{2.5}$ NAAQS under § 51.1002(b), in addition to meeting the Moderate area attainment plan submission requirements set forth at § 51.1003(a), the state(s) shall submit a Serious area attainment plan that meets all of the following requirements:

(i) Base year emissions inventory requirements set forth at § 51.1008(b)(1);

(ii) Attainment projected emissions inventory requirements set forth at § 51.1008(b)(2);

(iii) Serious area attainment plan control strategy requirements set forth at § 51.1010;

(iv) Attainment demonstration and modeling requirements set forth at § 51.1011;

(v) Reasonable Further Progress (RFP) requirements set forth at § 51.1012;

(vi) Quantitative milestone requirements set forth at § 51.1013;

(vii) Contingency measure requirements set forth at § 51.1014; and,

(viii) Nonattainment new source review plan requirements pursuant to § 51.165.

(2) The state(s) shall submit its Serious area attainment plan to the EPA according to the following schedule:

(i) *Discretionary reclassification.* (A) For any nonattainment area reclassified to Serious for a particular $PM_{2.5}$ NAAQS under § 51.1002(b)(1) because the EPA determined it cannot practicably attain the NAAQS by the applicable Moderate area attainment date, the state(s) shall submit to the EPA no later than 18 months from the effective date of reclassification the portion of the Serious area attainment plan that meets the following requirements:

(*1*) Base year emissions inventory requirements set forth at § 51.1008(b)(1);

(*2*) Serious area attainment plan control strategy requirements set forth at § 51.1010(a)(1) through (4); and,

(*3*) Nonattainment new source review plan requirements pursuant to § 51.165.

(B) The state(s) shall submit to the EPA the portion of the Serious area attainment plan that meets the requirements set forth at paragraphs (b)(1)(ii), and (b)(1)(iv) through (vii) of this section to the EPA by a date that is no later than 4 years after the effective date of reclassification, or 2 years prior to the attainment date, whichever is earlier.

(ii) Mandatory reclassification. For any nonattainment area reclassified to Serious for a particular $PM_{2.5}$ NAAQS under § 51.1002(b)(2) because the EPA determined it failed to attain the NAAQS by the applicable Moderate area attainment date, the state(s) shall submit to the EPA a Serious area attainment plan meeting the requirements set forth at paragraphs (b)(1)(i) through (viii) of this section within 18 months from the effective date of reclassification, or 2 years before the attainment date, whichever is earlier.

(iii) If the state(s) submits to the EPA a request for a Serious area attainment date extension simultaneous with the Serious area attainment plan due under paragraph (b)(1) of this section, such a plan shall meet the most stringent measure (MSM) requirements set forth at § 51.1010(b) in addition to the BACM and BACT and additional feasible measure requirements set forth at § 51.1010(a).

(c) *Serious nonattainment areas subject to CAA section 189(d) for failing to attain the $PM_{2.5}$ NAAQS by the applicable Serious area attainment date.* (1) For any Serious nonattainment area that fails to attain the $PM_{2.5}$ NAAQS by the applicable Serious area attainment date, the state(s) shall submit a revised Serious area attainment plan that demonstrates that each year the area will achieve at least a 5 percent reduction in emissions of direct $PM_{2.5}$ or a 5 percent reduction in emissions of a $PM_{2.5}$ plan precursor based on the most recent emissions inventory for the area. The revised attainment plan shall meet the following requirements:

(i) Emissions inventory requirements set forth at § 51.1008(c)(1);

(ii) Emissions inventory requirements set forth at § 51.1008(c)(2);

(iii) Serious area attainment plan control strategy requirements set forth at § 51.1010;

(iv) Attainment demonstration and modeling requirements set forth at § 51.1011;

(v) Reasonable Further Progress (RFP) requirements set forth at § 51.1012;

(vi) Quantitative milestone requirements set forth at § 51.1013;

(vii) Contingency measure requirements set forth at § 51.1014; and

(viii) Nonattainment new source review plan requirements pursuant to § 51.165.

(2) The state(s) shall submit to the EPA the revised attainment plan meeting the requirements set forth at paragraphs (c)(1)(i) through (vii) of this section no later than 12 months from the applicable Serious area attainment date that was previously missed.

(d) Any attainment plan submitted to the EPA under this section shall establish motor vehicle emissions budgets for the projected attainment year for the area, if applicable. The state shall develop such budgets according to the requirements of the transportation conformity rule as they apply to $PM_{2.5}$ nonattainment areas (40 CFR part 93).

§ 51.1004 Attainment dates.

(a) The state shall submit a projected attainment date as part of its attainment plan submission under § 51.1003 for any $PM_{2.5}$ NAAQS nonattainment area located in whole or in part within its boundaries. The state shall justify the projected attainment date for each such nonattainment area (or portion of a nonattainment area) as part of the demonstration of attainment developed and submitted according to the requirements set forth at § 51.1011 and according to the following:

(1) Nonattainment areas initially classified as Moderate.

(i) Except for nonattainment areas that meet the criterion under paragraph (a)(1)(ii) of this section, the projected attainment date for a Moderate $PM_{2.5}$ nonattainment area shall be as expeditious as practicable through the implementation of all control measures required under § 51.1009. The attainment date may be as late as the end of the sixth calendar year after the effective date of designation if the state demonstrates that the implementation of the control measures that qualify as RACM, RACT, and additional reasonable measures, but that are not necessary for demonstrating attainment by the end of the sixth calendar year after the effective date of designation, will not collectively advance the attainment date by at least 1 year.

(ii) The projected attainment date for a Moderate $PM_{2.5}$ nonattainment area which the state demonstrates cannot practicably attain the applicable $PM_{2.5}$ NAAQS by the end of the sixth calendar year after the effective date of designation of the area with the implementation of all control measures required under § 51.1009 shall be the end of the sixth calendar year after the effective date of designation unless and until the area is reclassified as Serious according to § 51.1002.

(2) *Nonattainment areas reclassified to Serious.* (i) Except for nonattainment areas that meet the criterion under paragraph (a)(2)(ii) of this section, the projected attainment date for a Serious $PM_{2.5}$ nonattainment area shall be as expeditious as practicable with the implementation of all control measures required under § 51.1010 but no later than the end of the tenth calendar year after the effective date of designation.

(ii) A state that submits an attainment plan that demonstrates that a Serious $PM_{2.5}$ nonattainment area cannot practicably attain the $PM_{2.5}$ NAAQS by the end of the tenth calendar year following the effective date of designation of the area with the implementation of all control measures required under § 51.1010(a) must request an extension of the Serious area attainment date consistent with § 51.1005(b). The request must propose a projected attainment date for the nonattainment area that is as expeditious as practicable, but no later than the end of the fifteenth calendar year following the effective date of designation of the area.

(3) Serious nonattainment areas subject to CAA section 189(d) for failing to attain by the applicable Serious area attainment date. The projected attainment date for a Serious $PM_{2.5}$ nonattainment area that failed to attain the $PM_{2.5}$ NAAQS by the applicable Serious area attainment date shall be as expeditious as practicable, but no later than 5 years following the effective date of the EPA's finding that the area failed to attain by the original Serious area attainment date, except that the Administrator may extend the attainment date to the extent the Administrator deems appropriate, for a period no greater than 10 years from the effective date of the EPA's determination that the area failed to attain, considering the severity of nonattainment and the availability and feasibility of pollution control measures.

(b) Except for attainment plans that meet the conditions of paragraphs (a)(1)(ii) or (a)(3) of this section, the Administrator shall approve an attainment date at the same time and in the same manner in which the Administrator approves the attainment plan for the area.

(1) In accordance with paragraph (a)(1)(ii) of this section, if a state demonstrates that a Moderate $PM_{2.5}$ nonattainment area cannot practicably attain the $PM_{2.5}$ NAAQS by the end of the sixth calendar year following the effective date of designation of the area, the EPA shall proceed under the provisions of § 51.1002(b)(1) to reclassify the area to Serious through notice-and-comment rulemaking.

(2) [Reserved]

§ 51.1005 Attainment date extensions.

(a) *Nonattainment areas initially classified as Moderate.* (1) A state with a Moderate $PM_{2.5}$ nonattainment area may apply for a 1-year attainment date extension for the area if the following conditions are met in the calendar year that includes the applicable attainment date for the area:

(i) The state has complied with all requirements and commitments pertaining to the area in the applicable implementation plan;

(ii) For an area designated nonattainment for a particular 24-hour $PM_{2.5}$ NAAQS for which the state seeks an attainment date extension, the 98th percentile 24-hour concentration at each monitor in the area for the calendar year that includes the applicable attainment date is less than or equal to the level of the applicable 24-hour standard (calculated according to the data analysis requirements in 40 CFR part 50, appendix N);

(iii) For an area designated nonattainment for a particular annual $PM_{2.5}$ NAAQS for which the state seeks an attainment date extension, the annual average concentration at each monitor in the area for the calendar year that includes the applicable attainment date is less than or equal to the level of the applicable annual standard (calculated according to the data analysis requirements in 40 CFR part 50, appendix N).

(2) The applicable implementation plan for a Moderate $PM_{2.5}$ nonattainment area for which a state seeks an attainment date extension is the plan submitted to the EPA to meet the requirements of § 51.1003(a).

(3) A Moderate area 1-year attainment date extension runs from January 1 to December 31 of the year following the year that includes the applicable attainment date.

(4) A state with a Moderate area that received an initial 1-year attainment date extension may apply for a second 1-year attainment date extension for the area if the state meets the conditions described in paragraph (a)(1) of this section for the first 1-year extension year.

(b) *Nonattainment areas reclassified as Serious.* (1) A state may apply for one attainment date extension not to exceed 5 years for a Serious nonattainment area if the following conditions are met:

(i) The state demonstrates that attainment of the applicable $PM_{2.5}$ NAAQS by the approved attainment date for the area would be impracticable or, in the absence of an approved attainment date, attainment of the applicable $PM_{2.5}$ NAAQS by the applicable statutory attainment date for the area would be impracticable;

(ii) The state has complied with all requirements and commitments pertaining to the area in the applicable implementation plan; and,

(iii) The state demonstrates that the attainment plan for the area includes the most stringent measures (MSM) that are included in the attainment plan of any state or are achieved in practice in any state, and can feasibly be implemented in the area consistent with § 51.1010(b).

(2) At the time of application for an attainment date extension, the state shall submit to the EPA a Serious area attainment plan that meets the following requirements:

(i) Base year and attainment projected emissions inventory requirements set forth at § 51.1008(b);

(ii) Most stringent measures (MSM) requirement described under paragraph (b)(1)(iii) of this section and § 51.1010(b), and best available control measures not previously submitted;

(iii) Attainment demonstration and modeling requirements set forth at § 51.1011 that justify the state's conclusion under paragraph (b)(1)(i) of this section, and that demonstrate attainment as expeditiously as practicable;

(iv) Reasonable Further Progress (RFP) requirements set forth at § 51.1012;

(v) Quantitative milestone requirements set forth at § 51.1013;

(vi) Contingency measure requirements set forth at § 51.1014; and,

(vii) Nonattainment new source review plan requirements pursuant to § 51.165.

(3) The applicable implementation plan for a Serious $PM_{2.5}$ nonattainment area for which a state seeks an attainment date extension under § 51.1004(a)(2)(ii) is the plan submitted to the EPA to meet the requirements set forth at § 51.1003(a).

(4) The applicable implementation plan for a Serious $PM_{2.5}$ nonattainment area for which a state seeks an attainment date extension under § 51.1004(a)(2)(i) is the plan submitted to the EPA to meet the requirements set forth at § 51.1003(b)(1).

(5) A state applying for an attainment date extension for a Serious nonattainment area under § 51.1004(a)(2)(ii) shall submit to the EPA a request for an extension at the same time as it submits the Serious area attainment plan due under § 51.1003(b)(1).

(6) A state applying for an attainment date extension for a Serious nonattainment area subsequent to submitting an initial Serious area attainment plan that demonstrated attainment of the NAAQS by the applicable attainment date consistent with § 51.1004(a)(2)(i) at the time of submission may apply for such an extension no later than 60 calendar days prior to the approved attainment date for the area or, in the absence of an approved attainment date, no later than 60 calendar days prior to the applicable statutory attainment date for the area.

(c) *Serious nonattainment areas subject to CAA section 189(d) for failing to attain by the applicable Serious area attainment date.* If a Serious area fails to attain a particular $PM_{2.5}$ NAAQS by the applicable Serious area attainment date, the area is then subject to the requirements of section 189(d) of the Act, and, for this reason, the state is prohibited from requesting an extension of the applicable Serious area attainment date for such area.

(d) For any attainment date extension request submitted pursuant to this section, the requesting state (or states) shall submit a written request and evidence of compliance with these regulations which includes both of the following:

(1) Evidence that all control measures submitted in the applicable attainment plan have been implemented, and

(2) Evidence that the area has made emission reduction progress that represents reasonable further progress toward timely attainment of the applicable $PM_{2.5}$ NAAQS.

(e) For a $PM_{2.5}$ nonattainment area located in two or more states or jurisdictions, all states and/or jurisdictions in which such area is located shall submit separate attainment date extension requests for the area consistent with the requirements set forth at paragraph (d) of this section.

§ 51.1006 Optional $PM_{2.5}$ precursor demonstrations

(a) A state may elect to submit to the EPA one or more precursor demonstrations for a specific nonattainment area. The analyses conducted in support of any precursor demonstration must be based on precursor emissions attributed to sources and activities in the nonattainment area.

(1) A comprehensive precursor demonstration must show that emissions of a particular precursor from all existing stationary, area, and mobile sources located in the nonattainment area do not contribute significantly to $PM_{2.5}$ levels that exceed the standard in the area. If the state chooses to conduct a comprehensive precursor demonstration, the state must conduct the analysis in paragraph (a)(1)(i) of this section and it may conduct the analysis in paragraph (a)(1)(ii) of this section.

(i) *Concentration-based contribution analysis.* The comprehensive precursor demonstration must evaluate the contribution of a particular precursor to $PM_{2.5}$ levels in the area. If the contribution of the precursor to $PM_{2.5}$ levels in the area is not significant, based on the facts and circumstances of the area, then the EPA may approve the demonstration.

(ii) *Sensitivity-based contribution analysis.* If the concentration-based contribution analysis does not support a finding of insignificant contribution, based on the facts and circumstances of the area, then the state may choose to submit an analysis evaluating the sensitivity of $PM_{2.5}$ levels in the area to a decrease in emissions of the precursor in order to determine whether the resulting air quality changes are significant. If the estimated air quality changes determined in the sensitivity analysis are not significant, based on the facts and circumstances of the area, then the EPA may approve the demonstration.

(iii) If a comprehensive precursor demonstration is approved by the EPA, the state will not be required to control emissions of the relevant precursor from existing sources in the current attainment plan.

(2) A major stationary source precursor demonstration must show that emissions of a particular precursor from all existing major stationary sources located in the nonattainment area do not contribute significantly to $PM_{2.5}$ levels that exceed the standard in the area. If the state chooses to conduct a major stationary source precursor demonstration, the state must conduct the analysis in paragraph (a)(2)(i) of this section and it may conduct the analysis in paragraph (a)(2)(ii) of this section.

(i) *Concentration-based contribution analysis.* The major stationary source precursor demonstration must evaluate the contribution of major source emissions of a particular precursor to $PM_{2.5}$ levels in the area. If the contribution of the precursor to $PM_{2.5}$ levels in the area is not significant, based on the facts and circumstances of the area, then the EPA may approve the demonstration.

(ii) *Sensitivity-based contribution analysis.* If the concentration-based contribution analysis does not support a finding of insignificant contribution, based on the facts and circumstances of the area, then the state may choose to submit an analysis evaluating the sensitivity of $PM_{2.5}$ levels in the area to a decrease in emissions of the precursor in order to determine whether the resulting air quality changes are significant. If the estimated air quality changes determined in the sensitivity analysis are not significant, based on the facts and circumstances of the area, then the EPA may approve the demonstration.

(iii) If a major stationary source precursor demonstration is approved by the EPA, the state will not be required to control emissions of the relevant precursor from existing major stationary sources in the current attainment plan.

(3)(i) A NNSR precursor demonstration must evaluate the sensitivity of $PM_{2.5}$ levels in the nonattainment area to an increase in emissions of a particular precursor in order to determine whether the resulting air quality changes are significant. If the estimated air quality changes determined in the sensitivity analysis are not significant, based on the facts and circumstances of the area, the state may use that information to identify new major stationary sources and major modifications of a precursor that will not be considered to contribute significantly to $PM_{2.5}$ levels that exceed the standard in the nonattainment area.

(ii) If a NNSR precursor demonstration for a particular $PM_{2.5}$ nonattainment area is approved, the state may exempt such new major stationary sources or major modifications of the particular precursor from the requirements for $PM_{2.5}$ in § 51.165.

(b) If an area with one or more precursor demonstrations approved by the EPA is required to submit another $PM_{2.5}$ attainment plan in accordance with § 51.1003 of this part, the current precursor demonstration(s) will not apply to the new plan. The state must submit the appropriate updated precursor demonstration(s) if it seeks to exempt sources of a particular precursor from control requirements in the new Serious area attainment demonstration or in the NNSR program for the Serious area.

§ 51.1007 [Reserved]

§ 51.1008 Emissions inventory requirements.

(a) For any nonattainment area initially classified as Moderate, the state shall submit to the EPA all of the following:

(1) A base year inventory for the nonattainment area for all emissions sources that meets the following minimum criteria:

(i) The inventory year shall be one of the 3 years for which monitored data were used for designations or another technically appropriate inventory year if justified by the state in the plan submission.

(ii) The inventory shall include actual emissions of all sources within the nonattainment area.

(iii) The emissions values shall be either annual total emissions, average-season-day emissions, or both, as appropriate for the relevant $PM_{2.5}$ NAAQS. The state shall include as part of the plan a rationale for providing annual or seasonal emissions, and the justification for the period used for any seasonal emissions calculations.

(iv) The inventory shall include direct $PM_{2.5}$ emissions, separately reported $PM_{2.5}$ filterable and condensable emissions, and emissions of the scientific $PM_{2.5}$ precursors, including precursors that are not $PM_{2.5}$ plan precursors pursuant to a precursor demonstration under § 51.1006.

(v) The state shall report emissions as point sources according to the point source emissions thresholds of the Air Emissions Reporting Requirements (AERR), 40 CFR part 51, subpart A.

(vi) The detail of the emissions inventory shall be consistent with the detail and data elements required by 40 CFR part 51, subpart A.

(2) An attainment projected inventory for the nonattainment area that meets the following minimum criteria:

(i) The year of the projected inventory shall be the most expeditious year for which projected emissions show modeled $PM_{2.5}$ concentrations below the level of the NAAQS.

(ii) The emissions values shall be projected emissions of the same sources included in the base year inventory for the nonattainment area (*i.e.,* those only within the nonattainment area) and any new sources. The state shall include in this inventory projected emissions growth and contraction from both controls and other causes during the relevant period.

(iii) The temporal period of emissions shall be the same temporal period (annual, average-season-day, or both) as the base year inventory for the nonattainment area.

(iv) Consistent with the base year inventory for the nonattainment area, the inventory shall include direct $PM_{2.5}$ emissions, separately reported $PM_{2.5}$ filterable and condensable emissions, and emissions of the scientific $PM_{2.5}$ precursors, including precursors that are not $PM_{2.5}$ plan precursors pursuant to a precursor demonstration under § 51.1006 of this part.

(v) The same sources reported as point sources in the base year inventory for the nonattainment area shall be included as point sources in the attainment projected inventory for the nonattainment area. Stationary nonpoint and mobile source projected emissions shall be provided using the same detail (*e.g.,* state, county, and process codes) as the base year inventory for the nonattainment area.

(vi) The same detail of the emissions included shall be consistent with the level of detail and data elements as in the base year inventory for the nonattainment area (*i.e.,* as required by 40 CFR part 41, subpart A).

(b) For any nonattainment area reclassified as Serious, the state shall submit to the EPA all of the following:

(1) For purposes of meeting the emissions inventory requirements of CAA section 172(c)(3), a base year inventory for the nonattainment area for all emissions sources that meets the requirements listed under paragraphs (a)(1) (ii) through (a)(1)(vi) of this section. In addition, the inventory shall use the Serious area definition of a major source listed under § 51.165(a)(1)(iv)(A), and(a)(1)(vii) and (viii), and consistent with Table 1 of Appendix A to subpart A of this part in determining sources to include as point sources. Finally, the inventory year shall be one of the 3 years for which monitored data were used for reclassification to Serious, or another technically appropriate inventory year if justified by the state in the plan submission.

(2) An attainment projected inventory for the nonattainment area that meets the criteria listed under paragraph (a)(2) of this section.

(c) *Serious nonattainment areas subject to CAA section 189(d) for failing to attain a $PM_{2.5}$ NAAQS by the applicable Serious area attainment date.* No later than 12 months after the EPA finds through notice-and-comment rulemaking that a Serious nonattainment area, or portion thereof contained within a state's borders, fails to attain a $PM_{2.5}$ NAAQS by the applicable attainment date and thus becomes subject to the requirements under CAA section 189(d), the state shall submit to the EPA all of the following:

(1) For purposes of meeting the emissions inventory requirements of CAA section 172(c)(3), a base year inventory for the nonattainment area for all emissions sources that meets the requirements listed under paragraphs (a)(1) (ii) through (a)(1)(vi) of this section. In addition, the inventory shall use the Serious area definition of a major source listed under § 51.165(a)(1)(iv)(A)(vii) and (viii) and consistent with Table 1 of Appendix A to subpart A of this part in determining sources to include as point sources. The inventory year shall be one of the 3 years for which monitored data were used to determine that the area failed to attain the $PM_{2.5}$ NAAQS by the applicable Serious area attainment date, or another technically appropriate inventory year if justified by the state in the plan submission.

(2) An attainment projected inventory for the nonattainment area as defined by § 51.1000(e) and that meets the criteria listed under paragraph (a)(2) of this section.

§ 51.1009 Moderate area attainment plan control strategy requirements.

(a) The state shall identify, adopt, and implement control measures, including control technologies, on sources of direct $PM_{2.5}$ emissions and sources of emissions of $PM_{2.5}$ plan precursors located in any Moderate $PM_{2.5}$ nonattainment area or portion thereof located within the state consistent with the following:

(1) The state shall identify all sources of direct $PM_{2.5}$ emissions and all sources of emissions of $PM_{2.5}$ precursors in the nonattainment area in accordance with the emissions inventory requirements of § 51.1008(a).

(2) The state shall identify all potential control measures to reduce emissions from all sources of direct $PM_{2.5}$ emissions and all sources of emissions of $PM_{2.5}$ plan precursors in the nonattainment area identified under paragraph (a)(1) of this section.

(i) The state is not required to identify and evaluate potential control measures to reduce emissions of a particular $PM_{2.5}$ precursor from any existing sources if the state has submitted a comprehensive precursor demonstration approved by the EPA pursuant to § 51.1006, except where the EPA requires such information as necessary to evaluate the comprehensive precursor demonstration pursuant to § 51.1006(a)(1)(ii).

(ii) The state is not required to identify and evaluate potential control measures to reduce emissions of a particular $PM_{2.5}$ precursor from any existing major stationary sources if the state has submitted a major stationary source precursor demonstration approved by the EPA pursuant to § 51.1006, except where the EPA requires such information as necessary to evaluate the major stationary source precursor demonstration pursuant to § 51.1006(a)(1)(ii).

(3) For any potential control measure identified under paragraph (a)(2) of this section, the state may make a demonstration that such measure is not technologically or economically feasible to implement in whole or in part by the end of the sixth calendar year following the effective date of designation of the area, and the state may eliminate such whole or partial measure from further consideration under this paragraph.

(i) For purposes of evaluating the technological feasibility of a potential control measure, the state may consider factors including but not limited to a source's processes and operating procedures, raw materials, physical plant layout, and potential environmental impacts such as increased water pollution, waste disposal, and energy requirements.

(ii) For purposes of evaluating the economic feasibility of a potential control measure, the state may consider factors including but not limited to capital costs, operating and maintenance costs, and cost effectiveness of the measure.

(iii) The state must submit to the EPA as part of its Moderate area attainment plan a detailed written justification for eliminating from further consideration any potential control measure identified under paragraph (a)(2) of this section on the basis of technological or economic infeasibility.

(4) The state shall use air quality modeling that meets the requirements of § 51.1011(a) and that accounts for emissions reductions estimated due to all technologically and economically feasible control measures identified for sources of direct $PM_{2.5}$ emissions and sources of emissions of $PM_{2.5}$ plan precursors in the Moderate $PM_{2.5}$ nonattainment area to demonstrate that the area can attain the applicable $PM_{2.5}$ NAAQS as expeditiously as practicable but no later than the end of the sixth year following the effective date of designation of the area. The state may use air quality modeling to demonstrate that the Moderate $PM_{2.5}$ nonattainment

area cannot practicably attain the applicable $PM_{2.5}$ NAAQS by such date.

(i) If the state demonstrates through air quality modeling that the area can attain the applicable $PM_{2.5}$ NAAQS by the end of the sixth calendar year following the effective date of designation of the area, the state shall adopt and implement all technologically and economically feasible control measures identified under paragraph (a)(3) of this section that are necessary to bring the area into attainment by such date. The state shall also adopt and implement all other technologically and economically feasible measures identified under paragraph (a)(3) of this section that, when considered collectively, would advance the attainment date for the area by at least 1 year. If the state demonstrates through this analysis that control measures for reducing emissions of a $PM_{2.5}$ precursor would not be necessary for attainment as expeditiously as practicable or to advance the attainment date, then the state would not be required to include control measures for the precursor in the Moderate area attainment plan, nor be required to address the precursor in the RFP plan, quantitative milestones and associated reports, and contingency measures.

(A) Any control measure identified for adoption and implementation under this paragraph that can be implemented in whole or in part by 4 years after the effective date of designation of the Moderate $PM_{2.5}$ nonattainment area shall be considered RACM for the area. Any such control measure that is also a control technology shall be considered RACT for the area.

(B) Any control measure identified for adoption and implementation under this paragraph that can only be implemented in whole or in part during the period beginning 4 years after the effective date of designation of the Moderate $PM_{2.5}$ nonattainment area and the applicable attainment date for the area shall be considered an additional reasonable measure for the area.

(ii) If the state demonstrates that the area cannot practicably attain the applicable $PM_{2.5}$ NAAQS by the end of the sixth calendar year following the effective date of designation of the area, the state shall adopt all technologically and economically feasible control measures identified under paragraph (a)(3) of this section. This requirement also applies to areas that demonstrate pursuant to section 179B that the plan would be adequate to attain or maintain the standard but for emissions emanating from outside the United States.

(A) Any control measure identified for adoption and implementation under this paragraph that can be implemented in whole or in part by 4 years after the effective date of designation of the Moderate $PM_{2.5}$ nonattainment area shall be considered RACM for the area. Any such control measure that is also a control technology shall be considered RACT for the area.

(B) Any control measure identified for adoption and implementation under this paragraph that can only be implemented in whole or in part during the period beginning 4 years after the effective date of designation of the Moderate $PM_{2.5}$ nonattainment area through the end of the sixth calendar year following the effective date of designation of the area shall be considered an additional reasonable measure for the area.

(b) The state shall adopt control measures, including control technologies, on sources of direct $PM_{2.5}$ emissions and sources of emissions of $PM_{2.5}$ plan precursors located within the state but outside the Moderate $PM_{2.5}$ nonattainment area if adopting such control measures is necessary to provide for attainment of the applicable $PM_{2.5}$ NAAQS in such area.

(c) For new or revised source emissions limitations on sources of direct $PM_{2.5}$ emissions, the state shall establish such emission limitations to apply either to the total of the filterable plus condensable fractions of direct $PM_{2.5}$, or to filterable $PM_{2.5}$ and condensable $PM_{2.5}$ separately.

§ 51.1010 Serious area attainment plan control strategy requirements.

(a) The state shall identify, adopt, and implement best available control measures, including control technologies, on sources of direct $PM_{2.5}$ emissions and sources of emissions of $PM_{2.5}$ plan precursors located in any Serious $PM_{2.5}$ nonattainment area or portion thereof located within the state and consistent with the following:

(1) The state shall identify all sources of direct $PM_{2.5}$ emissions and all sources of emissions of $PM_{2.5}$ precursors in the nonattainment area in accordance with the emissions inventory requirements of § 51.1008(b).

(2) The state shall identify all potential control measures to reduce emissions from all sources of direct $PM_{2.5}$ emissions and sources of emissions of $PM_{2.5}$ plan precursors in the nonattainment area identified under paragraph (a)(1) of this section.

(i) The state shall survey other NAAQS nonattainment areas in the U.S. and identify any measures for direct $PM_{2.5}$ and $PM_{2.5}$ plan precursors not previously identified by the state during the development of the Moderate area attainment plan for the area.

(ii) The state is not required to identify and evaluate potential control measures to reduce emissions of a particular $PM_{2.5}$ precursor from any existing sources if the state has submitted a comprehensive precursor demonstration approved by the EPA, except where the EPA requires such information as necessary to evaluate the comprehensive precursor demonstration pursuant to § 51.1006(a)(1)(ii).

(iii) The state is not required to identify and evaluate potential control measures to reduce emissions of a particular $PM_{2.5}$ precursor from any existing major stationary sources if the state has submitted a major stationary source precursor demonstration approved by the EPA, except where the EPA requires such information as necessary to evaluate the major stationary source demonstration pursuant to § 51.1006(a)(1)(ii).

(3) The state may make a demonstration that any measure identified under paragraph (a)(2) of this section is not technologically or economically feasible to implement in whole or in part by the end of the tenth calendar year following the effective date of designation of the area, and may eliminate such whole or partial measure from further consideration under this paragraph.

(i) For purposes of evaluating the technological feasibility of a potential control measure, the state may consider factors including but not limited to a source's processes and operating procedures, raw materials, physical plant layout, and potential environmental impacts such as increased water pollution, waste disposal, and energy requirements.

(ii) For purposes of evaluating the economic feasibility of a potential control measure, the state may consider capital costs, operating and maintenance costs, and cost effectiveness of the measure.

(iii) The state shall submit to the EPA as part of its Serious area attainment plan submission a detailed written justification for eliminating from further consideration any potential control measure identified under paragraph (a)(2) of this section on the basis of technological or economic infeasibility. The state shall provide as part of its written justification an explanation of how its criteria for determining the technological and economic feasibility of potential control measures under paragraphs (a)(3)(i) and (ii) of this section are more stringent than its criteria for determining the technological and economic feasibility of potential control measures under § 51.1009(a)(3)(i) and (ii) for the same sources in the $PM_{2.5}$ nonattainment area.

(4) Except as provided under paragraph (a)(3) of this section, the state shall adopt and implement all potential control measures identified under paragraph (a)(2) of this section.

(i) Any control measure that can be implemented in whole or in part by the end of the fourth year following the date of reclassification of the area to Serious shall be considered a best available control measure for the area. Any such control measure that is also a control technology for a stationary source in the area shall be considered a best available control technology for the area.

(ii) Any control measure that can be implemented in whole or in part between the end of the fourth year following the date of reclassification of the area to Serious and the applicable attainment date for the area shall be considered an additional feasible measure.

(5) The state shall use air quality modeling that meets the requirements of § 51.1011(b) and that accounts for emissions reductions estimated due to all best available control measures, including best available control technologies, and additional feasible measures identified for sources of direct $PM_{2.5}$ emissions and sources of emissions of $PM_{2.5}$ plan precursors in the area to demonstrate that the area can attain the $PM_{2.5}$ NAAQS as expeditiously as practicable but no later than the end of the tenth calendar year following the effective date of designation of the area, or to demonstrate that the Serious $PM_{2.5}$ nonattainment area cannot practicably attain the applicable $PM_{2.5}$ NAAQS by such date.

(b) For a Serious $PM_{2.5}$ nonattainment area for which air quality modeling demonstrates the area cannot practicably attain the applicable $PM_{2.5}$ NAAQS by the end of the tenth calendar year following the date of designation of the area, the state shall identify, adopt, and implement the most stringent control measures that are included in the attainment plan for any state or are achieved in practice in any state, and can be feasibly implemented in the area, consistent with the following requirements.

(1) The state shall identify all sources of direct $PM_{2.5}$ emissions and sources of emissions of $PM_{2.5}$ precursors in the nonattainment area in accordance with the emissions inventory requirements of § 51.1008(b).

(2) The state shall identify all potential control measures to reduce emissions from all sources of direct $PM_{2.5}$ emissions and sources of emissions of $PM_{2.5}$ plan precursors in the nonattainment area identified under paragraph (b)(1) of this section.

(i) For the sources and source categories represented in the emission inventory for the nonattainment area, the state shall identify the most stringent measures for reducing direct $PM_{2.5}$ and $PM_{2.5}$ plan precursors adopted into any SIP or used in practice to control emissions in any state.

(ii) The state shall reconsider and reassess any measures previously rejected by the state during the development of any previous Moderate area or Serious area attainment plan control strategy for the area.

(3) The state may make a demonstration that a measure identified under paragraph (b)(2) of this section is not technologically or economically feasible to implement in whole or in part by 5 years after the applicable attainment date for the area, and may eliminate such whole or partial measure from further consideration under this paragraph.

(i) For purposes of evaluating the technological feasibility of a potential control measure, the state may consider factors including but not limited to a source's processes and operating procedures, raw materials, physical plant layout, and potential environmental impacts such as increased water pollution, waste disposal, and energy requirements.

(ii) For purposes of evaluating the economic feasibility of a potential control measure, the state may consider capital costs, operating and maintenance costs, and cost effectiveness of the measure.

(iii) The state shall submit to the EPA as part of its Serious area attainment plan submission a detailed written justification for eliminating from further consideration any potential control measure identified under paragraph (b)(2) of this section on the basis of technological or economic infeasibility.

(4) Except as provided under paragraph (b)(3) of this section, the state shall adopt and implement all control measures identified under paragraph (b)(2) of this section that collectively shall achieve attainment as expeditiously as practicable but no later than 5 years after the applicable attainment date for the area.

(5) The state shall use air quality modeling that meets the requirements of § 51.1011(b) and that accounts for emissions reductions estimated due to all most stringent measures; best available control measures, including best available control technologies; and additional feasible measures identified for sources of direct $PM_{2.5}$ emissions and sources of emissions of $PM_{2.5}$ plan precursors in the area to demonstrate that the area can attain the $PM_{2.5}$ NAAQS as expeditiously as practicable but no later than the end of the fifteenth calendar year following the effective date of designation of the area.

(c) For a Serious $PM_{2.5}$ nonattainment area that the EPA has determined has failed to attain by the applicable attainment date, the state shall submit a revised attainment plan with a control strategy that demonstrates that each year the area will achieve at least a 5 percent reduction in emissions of direct $PM_{2.5}$ or a 5 percent reduction in emissions of a $PM_{2.5}$ plan precursor based on the most recent emissions inventory for the area; and that the area will attain the standard as expeditiously as practicable consistent with § 51.1004(a)(3). The plan shall meet the requirements of § 51.1003(c)–(d), and the following requirements:

(1) The state shall identify all sources of direct $PM_{2.5}$ emissions and sources of emissions of $PM_{2.5}$ precursors in the nonattainment area in accordance with the emissions inventory requirements of § 51.1008(b).

(2) The state shall identify all potential control measures to reduce emissions from all sources of direct $PM_{2.5}$ emissions and sources of emissions of $PM_{2.5}$ plan precursors in the nonattainment area identified under paragraph (c)(1) of this section.

(i) For the sources and source categories represented in the emission inventory for the nonattainment area, the state shall identify the most stringent measures for reducing direct $PM_{2.5}$ and $PM_{2.5}$ plan precursors adopted into any SIP or used in practice to control emissions in any state, as applicable.

(ii) The state shall reconsider and reassess any measures previously rejected by the state during the development of any Moderate area or Serious area attainment plan control strategy for the area.

(3) The state may make a demonstration that a measure identified under paragraph (c)(2) of this section is not technologically or economically feasible to implement in whole or in part within 5 years or such longer period as the EPA may determine is appropriate after the EPA's determination that the area failed to attain by the Serious area attainment date, and may eliminate such whole or partial measure from further consideration under this paragraph.

(i) For purposes of evaluating the technological feasibility of a potential control measure, the state may consider factors including but not limited to a source's processes and operating procedures, raw materials, physical plant layout, and potential environmental impacts such as increased water pollution, waste disposal, and energy requirements.

(ii) For purposes of evaluating the economic feasibility of a potential control measure, the state may consider capital costs, operating and maintenance costs, and cost effectiveness of the measure.

(iii) The state shall submit to the EPA as part of its Serious area attainment plan submission a detailed written justification for eliminating from further consideration any potential control measure identified under paragraph (c)(2) of this section on the basis of technological or economic infeasibility.

(4) Except as provided under paragraph (c)(3) of this section, the state shall adopt and implement all control measures identified under paragraph (c)(2) of this section that collectively achieve attainment of the standard as expeditiously as practicable pursuant to § 51.1004(a)(3).

(5) The state shall conduct air quality modeling that meets the requirements of § 51.1011(b) and that accounts for emissions reductions due to control measures needed to meet the annual reduction requirement of 5 percent of direct $PM_{2.5}$ or a $PM_{2.5}$ plan precursor; most stringent measures; best available control measures, including best available control technologies; and additional feasible measures identified for sources of direct $PM_{2.5}$ emissions and sources of emissions of $PM_{2.5}$ plan precursors in the area in order to demonstrate that the area can attain the $PM_{2.5}$ NAAQS as expeditiously as practicable.

(d) The state shall adopt control measures, including control technologies, on sources of direct $PM_{2.5}$ emissions and sources of emissions of $PM_{2.5}$ plan precursors located within the state but outside the Serious $PM_{2.5}$ nonattainment area if adopting such control measures is necessary to provide for attainment of the applicable $PM_{2.5}$ NAAQS in such area by the attainment date.

(e) For new or revised source emissions limitations on sources of direct $PM_{2.5}$ emissions, the state shall establish such emission limitations to apply either to the total of the filterable plus condensable fractions of direct $PM_{2.5}$, or to filterable $PM_{2.5}$ and condensable $PM_{2.5}$ separately.

§ 51.1011 Attainment demonstration and modeling requirements.

(a) *Nonattainment areas initially classified as Moderate.* The attainment demonstration due to the EPA as part of any Moderate area attainment plan required under § 51.1003(a) shall meet all of the following criteria:

(1) The attainment demonstration shall show the projected attainment date for the Moderate nonattainment area that is as expeditious as practicable in accordance with the requirements of § 51.1004(a)(1).

(2) The attainment demonstration shall meet the requirements of Appendix W of this part and shall include inventory data, modeling results, and emission reduction analyses on which the state has based its projected attainment date.

(3) The base year for the emissions inventory required for an attainment demonstration under this paragraph shall be one of the 3 years used for designations or another technically appropriate inventory year if justified by the state in the plan submission.

(4) The control strategies modeled as part of the attainment demonstration shall be consistent with the following as applicable:

(i) For a Moderate area that can demonstrate attainment of the applicable $PM_{2.5}$ NAAQS no later than the end of the sixth calendar year following the date of designation of the area with the implementation of RACM and RACT and additional reasonable measures, the control strategies modeled as part of the attainment demonstration shall be consistent with control strategy requirements under § 51.1009(a).

(ii) For a Moderate area that cannot practicably attain the applicable $PM_{2.5}$ NAAQS by the end of the sixth calendar year following the date of designation of the area with the implementation of RACM and RACT and additional reasonable measures, the control strategies modeled as part of the attainment demonstration shall be consistent with control strategy requirements under § 51.1009(b).

(5) Required time frame for obtaining emissions reductions. For each Moderate nonattainment area, the attainment plan must provide for implementation of all control measures needed for attainment as expeditiously as practicable. All control measures in the attainment demonstration must be implemented no later than the beginning of the year containing the applicable attainment date, notwithstanding RACM implementation deadline requirements in § 51.1009.

(b) *Nonattainment areas reclassified as Serious.* The attainment demonstration due to the EPA as part of a Serious area attainment plan required under § 51.1003(b) or (c) shall meet all of the following criteria:

(1) The attainment demonstration shall show the projected attainment date for the Serious nonattainment area that is as expeditious as practicable.

(2) The attainment demonstration shall meet the requirements of Appendix W of this part and shall include inventory data, modeling results, and emission reduction analyses on which the state has based its projected attainment date.

(3) The base year for the emissions inventories required for attainment demonstrations under this paragraph shall be one of the 3 years used for designations or another technically appropriate inventory year if justified by the state in the plan submission.

(4) The control strategies modeled as part of a Serious area attainment demonstration shall be consistent with the control strategies required pursuant to § 51.1003 and § 51.1010.

(5) Required timeframe for obtaining emissions reductions. For each Serious nonattainment area, the attainment plan must provide for implementation of all control measures needed for attainment as expeditiously as practicable. All control measures must be implemented no later than the beginning of the year containing the applicable attainment date, notwithstanding BACM implementation deadline requirements in § 51.1010.

§ 51.1012 Reasonable further progress (RFP) requirements.

(a) Each attainment plan for a $PM_{2.5}$ nonattainment area shall include an RFP plan that demonstrates that sources in the area will achieve such annual incremental reductions in emissions of direct $PM_{2.5}$ and $PM_{2.5}$ plan precursors as are necessary to ensure attainment of the applicable $PM_{2.5}$ NAAQS as expeditiously as practicable. The RFP plan shall include all of the following:

(1) A schedule describing the implementation of control measures during each year of the applicable attainment plan. Control measures for Moderate area attainment plans are required in § 51.1009, and control measures for Serious area attainment plans are required in § 51.1010.

(2) RFP projected emissions for direct $PM_{2.5}$ and all $PM_{2.5}$ plan precursors for each applicable milestone year, based on the anticipated implementation schedule for control measures required in paragraph (a)(1) of this section. For purposes of establishing motor vehicle emissions budgets for transportation conformity purposes (as required in 40

CFR part 93) for a $PM_{2.5}$ nonattainment area, the state shall include in its RFP submission an inventory of on-road mobile source emissions in the nonattainment area for each milestone year.

(3) An analysis that presents the schedule of control measures and estimated emissions changes to be achieved by each milestone year, and that demonstrates that the control strategy will achieve reasonable progress toward attainment between the applicable base year and the attainment year. The analysis shall rely on information from the base year inventory for the nonattainment area required in § 51.1008(a)(1) and the attainment projected inventory for the nonattainment area required in § 51.1008(a)(2), in addition to the RFP projected emissions required in paragraph (a)(2) of this section.

(4) An analysis that demonstrates that by the end of the calendar year for each milestone date for the area determined in accordance with § 51.1013(a), pollutant emissions will be at levels that reflect either generally linear progress or stepwise progress in reducing emissions on an annual basis between the base year and the attainment year. A demonstration of stepwise progress must be accompanied by appropriate justification for the selected implementation schedule.

(5) At the state's election, an analysis that identifies air quality targets associated with the RFP projected emissions identified for the milestone years at the design value monitor locations.

(b) For a multi-state or multi-jurisdictional nonattainment area, the RFP plans for each state represented in the nonattainment area shall demonstrate RFP on the basis of common multi-state inventories. The states or jurisdictions within which the area is located must provide a coordinated RFP plan. Each state in a multi-state nonattainment area must ensure that the sources within its boundaries comply with enforceable emission levels and other requirements that in combination with the reductions planned in other state(s) within the nonattainment area will provide for attainment as expeditiously as practicable and demonstrate RFP consistent with these regulations.

§ 51.1013 Quantitative milestone requirements.

(a) Consistent with CAA section 189(c)(1), the state must submit in each attainment plan for a $PM_{2.5}$ nonattainment area specific quantitative milestones that demonstrate reasonable further progress toward attainment of the applicable $PM_{2.5}$ NAAQS in the area and that meet the following requirements:

(1) *Nonattainment areas initially classified as Moderate.* (i) Except as provided in paragraph (a)(4) of this section, each attainment plan submittal for a Moderate $PM_{2.5}$ nonattainment area shall contain quantitative milestones to be achieved no later than a milestone date of 4.5 years and 7.5 years from the date of designation of the area.

(ii) The plan shall contain quantitative milestones to be achieved by the milestone dates specified in paragraph (a)(1)(i) of this section, as applicable, and that provide for objective evaluation of reasonable further progress toward timely attainment of the applicable $PM_{2.5}$ NAAQS in the area. At a minimum, each quantitative milestone plan must include a milestone for tracking progress achieved in implementing the SIP control measures, including RACM and RACT, by each milestone date.

(2) *Nonattainment areas reclassified as Serious.* (i) Except as provided in paragraph (a)(4) of this section, each attainment plan submission that demonstrates that a Serious $PM_{2.5}$ nonattainment area can attain a particular $PM_{2.5}$ NAAQS by the end of the tenth calendar year following the effective date of designation of the area with the implementation of control measures as required under § 51.1010(a) shall contain quantitative milestones to be achieved no later than milestone dates of 7.5 years and 10.5 years, respectively, from the date of designation of the area.

(ii) Except as provided in paragraph (a)(4) of this section, each attainment plan submission that demonstrates that a Serious $PM_{2.5}$ nonattainment area cannot practicably attain a particular $PM_{2.5}$ NAAQS by the end of the tenth calendar year following the date of designation of the area with the implementation of control measures required under § 51.1010(a) shall contain quantitative milestones to be achieved no later than milestone dates of 7.5 years, 10.5 years, and 13.5 years from the date of designation of the area. If the attainment date is beyond 13.5 years from the date of designation of the area, such attainment plan shall also contain a quantitative milestones to be achieved no later than milestone dates of 16.5 years, respectively, from the date of designation of the area.

(iii) The plan shall contain quantitative milestones to be achieved by the milestone dates specified in paragraphs (a)(2)(i) and (ii) of this section, as applicable, and that provide for objective evaluation of reasonable further progress toward timely attainment of the applicable $PM_{2.5}$ NAAQS in the area. At a minimum, each quantitative milestone plan must include a milestone for tracking progress achieved in implementing SIP control measures, including BACM and BACT, by each milestone date.

(3) *Serious areas that fail to attain by the applicable Serious area attainment date.* (i) Except as provided in paragraph (a)(4) of this section, each attainment plan submission for a Serious area that failed to attain a particular $PM_{2.5}$ NAAQS by the applicable Serious area attainment date and is therefore subject to the requirements of CAA section 189(d) and § 51.1003(c) shall contain quantitative milestones.

(A) If the attainment plan is due prior to a date 13.5 years from designation of the area, then the plan shall contain milestones to be achieved by no later than a milestone date of 13.5 years from the date of designation of the area, and every 3 years thereafter, until the milestone date that falls within 3 years after the applicable attainment date.

(B) If the attainment plan is due later than a date 13.5 years from designation of the area, then the plan shall contain milestones to be achieved by no later than a milestone date of 16.5 years from the date of designation of the area, and every 3 years thereafter, until the milestone date that falls within 3 years after the applicable attainment date.

(ii) The plan shall contain quantitative milestones to be achieved by the milestone dates for the area, and that provide for objective evaluation of reasonable further progress toward timely attainment of the applicable $PM_{2.5}$ NAAQS in the area. At a minimum, each quantitative milestone plan must include a milestone for tracking progress achieved in implementing the SIP control measures by each milestone date.

(4) Each attainment plan submission for an area designated nonattainment for the 1997 and/or 2006 $PM_{2.5}$ NAAQS before January 15, 2015, shall contain quantitative milestones to be achieved no later than 3 years after December 31, 2014, and every 3 years thereafter until the milestone date that falls within 3 years after the applicable attainment date.

(b) Not later than 90 days after the date on which a milestone applicable to a $PM_{2.5}$ nonattainment area occurs, each state in which all or part of such area is located shall submit to the Administrator a milestone report that contains all of the following:

(1) A certification by the Governor or Governor's designee that the SIP control strategy is being implemented consistent with the RFP plan, as described in the applicable attainment plan;

(2) Technical support, including calculations, sufficient to document completion statistics for appropriate milestones and to demonstrate that the quantitative milestones have been satisfied and how the emissions reductions achieved to date compare to those required or scheduled to meet RFP; and,

(3) A discussion of whether the area will attain the applicable $PM_{2.5}$ NAAQS by the projected attainment date for the area.

(c) If a state fails to submit a milestone report by the date specified in paragraph (b) of this section, the Administrator shall require the state to submit, within 9 months after such failure, a plan revision that assures that the area will achieve the next milestone or attain the applicable NAAQS by the applicable date, whichever is earlier. If the Administrator determines that an area has not met any applicable milestone by the milestone date, the state shall submit, within 9 months after such determination, a plan revision that assures that the area will achieve the next milestone or attain the applicable NAAQS by the applicable date, whichever is earlier.

§ 51.1014 Contingency measure requirements.

(a) The state must include as part of each attainment plan submitted under this subpart for a $PM_{2.5}$ nonattainment area specific contingency measures that shall take effect with minimal further action by the state or the EPA following a determination by the Administrator that the area has failed:

(1) To meet any RFP requirement in an attainment plan approved in accordance with § 51.1012;

(2) To meet any quantitative milestone in an attainment plan approved in accordance with § 51.1013;

(3) To submit a quantitative milestone report required under § 51.1013(b); or,

(4) To attain the applicable $PM_{2.5}$ NAAQS by the applicable attainment date.

(b) The contingency measures adopted as part of a $PM_{2.5}$ attainment plan shall meet all of the following requirements:

(1) The contingency measures shall consist of control measures that are not otherwise included in the control strategy or that achieve emissions reductions not otherwise relied upon in the control strategy for the area; and,

(2) Each contingency measure shall specify the timeframe within which its requirements become effective following a determination by the Administrator under paragraph (a) of this section.

(c) The attainment plan submission shall contain a description of the specific trigger mechanisms for the contingency measures and specify a schedule for implementation.

§ 51.1015 Clean data requirements.

(a) *Nonattainment areas initially classified as Moderate.* Upon a determination by the EPA that a Moderate $PM_{2.5}$ nonattainment area has attained the $PM_{2.5}$ NAAQS, the requirements for the state to submit an attainment demonstration, provisions demonstrating that reasonably available control measures (including reasonably available control technology for stationary sources) shall be implemented no later than 4 years following the date of designation of the area, reasonable further progress plan, quantitative milestones and quantitative milestone reports, and contingency measures for the area shall be suspended until such time as:

(1) The area is redesignated to attainment, after which such requirements are permanently discharged; or,

(2) The EPA determines that the area has re-violated the $PM_{2.5}$ NAAQS, at which time the state shall submit such attainment plan elements for the Moderate nonattainment area by a future date to be determined by the EPA and announced through publication in the **Federal Register** at the time EPA determines the area is violating the $PM_{2.5}$ NAAQS.

(b) *Nonattainment areas reclassified as Serious.* Upon a determination by the EPA that a Serious $PM_{2.5}$ nonattainment area has attained the $PM_{2.5}$ NAAQS, the requirements for the state to submit an attainment demonstration, reasonable further progress plan, quantitative milestones and quantitative milestone reports, and contingency measures for the area shall be suspended until such time as:

(1) The area is redesignated to attainment, after which such requirements are permanently discharged; or,

(2) The EPA determines that the area has re-violated the $PM_{2.5}$ NAAQS, at which time the state shall submit such attainment plan elements for the Serious nonattainment area by a future date to be determined by the EPA and announced through publication in the **Federal Register** at the time the EPA determines the area is violating the $PM_{2.5}$ NAAQS.

§ 51.1016 Continued applicability of the FIP and SIP requirements pertaining to interstate transport under CAA section 110(a)(2)(D)(i) and (ii) after revocation of the 1997 primary annual $PM_{2.5}$ NAAQS.

All control requirements associated with a FIP or approved SIP in effect for an area pursuant to obligations arising from CAA section 110(a)(2)(D)(i) and (ii) as of October 24, 2016, such as the CAIR or the CSAPR, shall continue to apply after revocation of the 1997 primary annual $PM_{2.5}$ NAAQS. Control requirements associated with a FIP or approved into the SIP pursuant to obligations arising from CAA section 110(a)(2)(D)(i) and (ii), including 40 CFR 51.123, 51.124, 52.35, 52.36, 52.38 and 52.39, may be modified by the state only if the requirements of § 51.123, 51.124, 52.35, 52.36, 52.38 and 52.39, including statewide annual SO_2 and annual NO_X emission budgets, continue to be in effect. Any such modification must meet the requirements of CAA section 110(l).

■ 7. In Appendix S to Part 51:

■ a. Revise paragraph II.A.4.(i)(*a*) introductory text;

■ b. Add paragraphs II.A.4.(i)(*a*)(*7*)–(*8*);

■ c. Revise paragraph II.A.10.(i);

■ d. Add paragraph II.A.10.(vi);

■ e. Revise paragraph II.A.31.(ii)(*b*)(*2*); and

■ f. Add paragraphs II.A.31.(ii)(*b*)(*3*) and (*4*).

The revisions and additions read as follows:

Appendix S to Part 51—Emission Offset Interpretative Ruling

* * * * *

II. * * *

A. * * *

4. (i) * * *

(*a*) Any stationary source of air pollutants which emits, or has the potential to emit, 100 tons per year or more of a regulated NSR pollutant (as defined in paragraph II.A.31 of this Ruling), except that lower emissions thresholds shall apply in areas subject to subpart 2, subpart 3, or subpart 4 of part D, title I of the Act, according to paragraphs II.A.4(i)(*a*)(1) through (8) of this ruling.

* * * * *

(*7*) 70 tons per year of $PM_{2.5}$ in any serious nonattainment area for $PM_{2.5}$.

(*8*) 70 tons per year of any individual $PM_{2.5}$ precursor (as defined in paragraph II.A.31 of this Ruling) in any Serious nonattainment area for $PM_{2.5}$.

* * * * *

10.(i) *Significant* means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate

Carbon monoxide: 100 tons per year (tpy)
Nitrogen oxides: 40 tpy
Sulfur dioxide: 40 tpy
Ozone: 40 tpy of Volatile organic compounds or Nitrogen oxides
Lead: 0.6 tpy
Particulate matter: 25 tpy of Particulate matter emissions
PM_{10}: 15 tpy
$PM_{2.5}$: 10 tpy of direct $PM_{2.5}$ emissions; 40 tpy of Sulfur dioxide emissions, 40 tpy of Nitrogen oxides emissions, or 40 tpy of Volatile organic compound emissions, to the extent that any such pollutant is defined as a precursor for $PM_{2.5}$ in paragraph II.A.31 of this Ruling.

* * * * *

(vi) In any nonattainment area for $PM_{2.5}$ in which a state must regulate Ammonia as a regulated NSR pollutant (as a $PM_{2.5}$ precursor) as defined in paragraph II.A.31 of this Ruling, the reviewing authority shall define "significant" for Ammonia for that area and establish a record to document its supporting basis. All sources with modification projects with increases in Ammonia emissions that are not subject to Section IV of this Ruling must maintain records of the non-applicability of Section IV that reference the definition of "significant" for Ammonia that is established by the reviewing authority in the nonattainment area where the source is located.

31. * * *

(ii) * * *

(*b*) * * *

(*2*) Sulfur dioxide and Nitrogen oxides are regulated as precursors to $PM_{2.5}$ in all $PM_{2.5}$ nonattainment areas.

(*3*) For any area that was designated nonattainment for $PM_{2.5}$ on or before April 15, 2015, Volatile organic compounds and Ammonia shall be regulated as precursors to $PM_{2.5}$ beginning on April 15, 2017, with respect to any permit issued for $PM_{2.5}$, unless the following conditions are met: The state submits a SIP for the Administrator's review containing the state's preconstruction review provisions for $PM_{2.5}$ consistent with § 51.165 and a complete NNSR precursor demonstration consistent with § 51.1006(a)(3); and such SIP is determined to be complete by the Administrator or deemed to be complete by operation of law in accordance with section 110(k)(1)(B) of the Act by April 15, 2017. If these conditions are met, the precursor(s) addressed by the NNSR precursor demonstration (Volatile organic compounds, Ammonia, or both) shall not be regulated as a precursor to $PM_{2.5}$ in such area. If the Administrator subsequently disapproves the state's preconstruction review provisions for $PM_{2.5}$ and the NNSR precursor demonstration, the precursor(s) addressed by the NNSR precursor demonstration shall be regulated as a precursor to $PM_{2.5}$ under this Ruling in such area as of April 15, 2017, or the effective date of the disapproval, whichever date is later.

(*4*) For any area that is designated nonattainment for $PM_{2.5}$ after April 15, 2015, and was not already designated nonattainment for $PM_{2.5}$ on or immediately prior to such date, Volatile organic compounds and Ammonia shall be regulated as precursors to $PM_{2.5}$ under this Ruling beginning 24 months from the date of designation as nonattainment for $PM_{2.5}$ with respect to any permit issued for $PM_{2.5}$, unless the following conditions are met: the state submits a SIP for the Administrator's review which contains the state's preconstruction review provisions for $PM_{2.5}$ consistent with § 51.165 and a complete NNSR precursor demonstration consistent with § 51.1006(a)(3); and such SIP is determined to be complete by the Administrator or deemed to be complete by operation of law in accordance with section 110(k)(1)(B) of the Act by the date 24 months from the date of designation. If these conditions are met, the precursor(s) addressed by the NNSR precursor demonstration (Volatile organic compounds, Ammonia, or both) shall not be regulated as a precursor to $PM_{2.5}$ in such area. If the Administrator subsequently disapproves the state's preconstruction review provisions for $PM_{2.5}$ and the NNSR precursor demonstration, the precursor(s) addressed by the NNSR precursor demonstration shall be regulated as a precursor to $PM_{2.5}$ under this Ruling in such area as of the date 24 months from the date of designation, or the effective date of the disapproval, whichever date is later.

* * * * *

PART 93—DETERMINING CONFORMITY OF FEDERAL ACTIONS TO STATE OR FEDERAL IMPLEMENTATION PLANS

■ 8. The authority citation for part 93 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart B—Determining Conformity of General Federal Actions to State or Federal Implementation Plans

■ 9. In § 93.153, revise paragraphs (b)(1) and (2) to read as follows:

§ 93.153 Applicability.

* * * * *

(b) * * *

(1) For purposes of paragraph (b) of this section the following rates apply in nonattainment areas (NAA's):

	Tons/year
Ozone (VOC's or NO_X):	
Serious NAA's	50
Severe NAA's	25
Extreme NAA's	10
Other ozone NAA's outside an ozone transport region	100
Other ozone NAA's inside an ozone transport region:	
VOC	50
NO_X	100
Carbon Monoxide: All maintenance areas	100
SO_2 or NO_2: All NAA's	100
PM_{10}:	
Moderate NAA's	100
Serious NAA's	70
$PM_{2.5}$ (direct emissions, SO_2, NO_X, VOC, and Ammonia):	
Moderate NAA's	100
Serious NAA's	70
Pb: All NAA's	25

(2) For purposes of paragraph (b) of this section the following rates apply in maintenance areas:

	Tons/year
Ozone (NO_X), SO_2 or NO_2:	
All maintenance areas	100
Ozone (VOC's).	
Maintenance areas inside an ozone transport region	50
Maintenance areas outside an ozone transport region	100
Carbon monoxide: All maintenance areas	100
PM_{10}: All maintenance areas	100
$PM_{2.5}$ (direct emissions, SO_2, NO_X, VOC, and Ammonia)	100
All maintenance areas	100
Pb: All maintenance areas	25

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Part III

Department of Energy

10 CFR Parts 429 and 430
Energy Conservation Program: Test Procedures for Central Air Conditioners and Heat Pumps; Proposed Rule

DEPARTMENT OF ENERGY

10 CFR Parts 429 and 430

[Docket No. EERE–2016–BT–TP–0029]

RIN 1904–AD71

Energy Conservation Program: Test Procedures for Central Air Conditioners and Heat Pumps

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Supplemental notice of proposed rulemaking.

SUMMARY: The U.S. Department of Energy (DOE) proposes to revise its test procedures for central air conditioners and heat pumps (CAC/HP) established under the Energy Policy and Conservation Act. DOE published several proposals in a November 2015 supplemental notice of proposed rulemaking (SNOPR). DOE finalized some of the proposed test procedure amendments in a June 2016 final rule. This SNOPR proposes additional revisions to some of the amendments proposed in the past notices and proposes some additional amendments. Specifically, this SNOPR proposes two sets of amendments to the test procedure: Amendments to appendix M that would be required as the basis for making efficiency representations starting 180 days after final rule publication; and amendments as part of a new appendix M1 that would be the basis for making efficiency representations as of the compliance date for any amended energy conservation standards. Broadly speaking, the proposed amendments address the off-mode test procedures, clarifications on test set-up and fan delays, limits to gross indoor fin surface area for valid combinations, external static pressure conditions for testing, clarifications on represented values for CAC/HP that are distributed in commerce with multiple refrigerants, and the methodology for testing and calculating heating performance. DOE does not expect the proposed changes to appendix M to change measured efficiency. However, DOE has determined that the proposed procedures in new appendix M1 would change measured efficiency. DOE welcomes comments from the public on any subject within the scope of this test procedure rulemaking.

DATES: DOE will accept comments, data, and information regarding this supplemental notice of proposed rulemaking (SNOPR) no later than September 23, 2016. See section V, "Public Participation," for details.

DOE will hold a public meeting on Friday, August 26, 2016, from 10 a.m. to 2 p.m., in Washington, DC. The meeting will also be broadcast as a webinar. See section V, Public Participation, for webinar registration information, participant instructions, and information about the capabilities available to webinar participants.

ADDRESSES: The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 1E–245, 1000 Independence Avenue SW., Washington, DC 20585.

Any comments submitted must identify the Test Procedure SNOPR for central air conditioners and heat pumps, and provide docket number EERE–2016–BT–TP–0029 and/or regulatory information number (RIN) number 1904–AD 71. Comments may be submitted using any of the following methods:

(1) *Federal eRulemaking Portal: www.regulations.gov.* Follow the instructions for submitting comments.

(2) *Email: CACHeatPump2016TP0029@ee.doe.gov* Include the docket number and/or RIN in the subject line of the message.

(3) *Mail:* Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, Mailstop EE–5B, 1000 Independence Avenue SW., Washington, DC 20585–0121. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

(4) *Hand Delivery/Courier:* Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, 950 L'Enfant Plaza, SW., 6th Floor, Washington, DC 20024. Telephone: (202) 586–6636. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

For detailed instructions on submitting comments and additional information on the rulemaking process, see section V of this document (Public Participation).

Docket: The docket, which includes **Federal Register** notices, comments, and other supporting documents/materials, is available for review at *www.regulations.gov.* All documents in the docket are listed in the *www.regulations.gov* index. However, some documents listed in the index, such as those containing information that is exempt from public disclosure, may not be publicly available.

The docket Web page can be found at *https://www.regulations.gov/docket?D=EERE-2016-BT-TP-0029.* The docket Web page will contain simple instructions on how to access all documents, including public comments, in the docket. See section V for information on how to submit comments through *www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT:

Ashley Armstrong, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, EE–5B, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 586–6590. Email: *Ashley.Armstrong@ee.doe.gov.*

Johanna Jochum, U.S. Department of Energy, Office of the General Counsel, GC–33, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 287–6307. Email: *Johanna.Jochum@hq.doe.gov.*

For further information on how to submit a comment, review other public comments and the docket, or participate in the public meeting, contact the Appliance and Equipment Standards Program staff at (202) 586–6636 or by email: *CACHeatPump2016TP0029@ee.doe.gov.*

SUPPLEMENTARY INFORMATION: DOE is not proposing to incorporate any new standards by reference in this supplemental notice of proposed rulemaking.

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I. Authority and Background

A. Authority

Title III, Part B[1] of the Energy Policy and Conservation Act of 1975 (''EPCA'' or ''the Act''), Public Law 94–163 (42 U.S.C. 6291–6309, as codified) sets forth a variety of provisions designed to improve energy efficiency and established the Energy Conservation Program for Consumer Products Other Than Automobiles.[2] These products include central air conditioners and central air conditioning heat pumps,[3] (single-phase[4] with rated cooling capacities less than 65,000 British thermal units per hour (Btu/h))), which are the focus of this SNOPR. (42 U.S.C. 6291(1)–(2), (21) and 6292(a)(3))

Under EPCA, DOE's energy conservation program generally consists of four parts: (1) Testing; (2) labeling; (3) Federal energy conservation standards; and (4) certification, compliance, and enforcement. The testing requirements consist of test procedures that manufacturers of covered products must use as the basis of: (1) Certifying to DOE that their products comply with applicable energy conservation standards adopted pursuant to EPCA, and (2) making other representations about the efficiency of those products. (42 U.S.C. 6293(c); 42 U.S.C. 6295(s)) Similarly, DOE must use these test procedures to determine whether covered products comply with any relevant standards promulgated under EPCA. (42 U.S.C. 6295(s))

EPCA sets forth criteria and procedures DOE must follow when prescribing or amending test procedures for covered products. (42 U.S.C. 6293(b)(3)) EPCA provides, in relevant part, that any test procedures prescribed or amended under this section shall be reasonably designed to produce test results which measure the energy efficiency, energy use, or estimated annual operating cost of a covered product during a representative average use cycle or period of use, and shall not be unduly burdensome to conduct. *Id.*

In addition, if DOE determines that a test procedure amendment is warranted, it must publish proposed test procedures and offer the public an opportunity to present oral and written comments on them. (42 U.S.C. 6293(b)(2)) Finally, in any rulemaking to amend a test procedure, DOE must determine to what extent, if any, the amended test procedure would alter the measured energy efficiency of any covered product as determined under the existing test procedure. (42 U.S.C. 6293(e)(1))

The Energy Independence and Security Act of 2007 (EISA 2007), Public Law 110–140, amended EPCA to require that, at least once every 7 years, DOE must review test procedures for all covered products and either amend the test procedures (if the Secretary determines that amended test procedures would more accurately or fully comply with the requirements of 42 U.S.C. 6293(b)(3)) or publish a notice in the **Federal Register** of any determination not to amend a test procedure. (42 U.S.C. 6293(b)(1)(A))

DOE's existing test procedures for CAC/HP adopted pursuant to these provisions appear under Title 10 of the Code of Federal Regulations (CFR) part 430, subpart B, appendix M (''Uniform Test Method for Measuring the Energy Consumption of Central Air Conditioners and Heat Pumps''). These procedures establish the currently permitted means for determining energy efficiency and annual energy consumption for CAC/HP. Some of the amendments proposed in this SNOPR will alter the measured efficiency, as represented in the regulating metrics of seasonal energy efficiency ratio (SEER), energy efficiency ratio (EER), and heating seasonal performance factor (HSPF). These amendments are proposed as part of a new appendix M1. Use of the test procedure changes proposed in this notice as part of a new appendix M1, if adopted, would become mandatory to demonstrate compliance if the existing energy conservation standards are revised. (42 U.S.C. 6293(e)(2)) In revising the energy conservation standards in a separate rulemaking, DOE would create a cross-walk from the existing standards under the current test procedure to what the standards would be if tested using the revised test procedure.

On December 19, 2007, the President signed the Energy Independence and Security Act of 2007 (EISA 2007), Public Law 110–140, which contains numerous amendments to EPCA. Section 310 of EISA 2007 established that the Department's test procedures for all covered products must account for standby mode and off mode energy consumption. (42 U.S.C. 6295(gg)(2)(A)) For CAC/HP, standby mode is incorporated into the SEER and HSPF metrics, while off mode power consumption is separately regulated. This SNOPR includes proposals relevant to the determination of both SEER and HSPF (including standby mode) and off mode power consumption. DOE would then use the cross-walked equivalent of the existing standard as the baseline for its standards analysis to prevent backsliding as required under 42 U.S.C. 6295(o)(1).

B. Background

DOE initiated a round of test procedure revisions for CAC/HP by publishing a notice of proposed rulemaking in the **Federal Register** on June 2, 2010 (June 2010 NOPR; 75 FR 31224). Subsequently, DOE published several supplemental notices of proposed rulemaking (SNOPRs) on April 1, 2011 (April 2011 SNOPR; 76 FR 18105), on October 24, 2011 (October 2011 SNOPR: 76 FR 65616), and on November 9, 2015 (November 2015 SNOPR; 80 FR 69278) in response to comments received and to address additional needs for test procedure revisions. The June 2010 NOPR and the subsequent SNOPRs addressed a broad range of test procedure issues. On June 8, 2016, DOE published a test procedure final rule (June 2016 final rule) that finalized test procedure amendments associated with many but not all of these issues. 81 FR 36992.

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[1] For editorial reasons, Part B was codified as Part A in the U.S. Code.

[2] All references to EPCA in this document refer to the statute as amended through the Energy Efficiency Improvement Act of 2015, Public Law 114–11 (Apr. 30, 2015).

[3] This notice uses the term ''CAC/HP'' to refer specifically to central air conditioners (which include heat pumps) as defined by EPCA. 42 U.S.C. 6291(21.)

[4] Where this notice uses the term ''CAC/HP'', they are in reference specifically to central air conditioners and heat pumps as defined by EPCA.

On November 5, 2014, DOE published a request for information for energy conservation standards (ECS) for CAC/HP (November 2014 ECS RFI). 79 FR 65603. In response, several stakeholders provided comments suggesting that DOE amend the current test procedure. The November 2015 SNOPR addressed those test procedure-related comments, but, as mentioned in this preamble, not all of the related issues were resolved in the June 2016 final rule.

On July 14, 2015, DOE published a notice of intent to form a Working Group to negotiate a NOPR for energy conservation standards for CAC/HP and requested nominations from parties interested in serving as members of the Working Group. 80 FR 40938. The Working Group, which ultimately consisted of 15 members in addition to one member from Appliance Standards and Rulemaking Federal Advisory Committee (ASRAC), and one DOE representative, identified a number of issues related to testing and certification and made several recommendations that are being addressed in the proposals of this SNOPR. DOE believes proposed changes are consistent with the intent of the Working Group.

This SNOPR addresses proposals and comments from two rulemakings: (1) Stakeholder comments and proposals regarding the CAC test procedure (CAC TP: Docket No. EERE–2009–BT–TP–0004); and (2) stakeholder comments and proposals regarding the CAC energy conservation standard from the Working Group (CAC ECS: Docket No. EERE–2014–BT–STD–0048). Comments received through documents located in the test procedure docket are identified by "CAC TP" preceding the comment citation. Comments received through documents located in the energy conservation standard docket (EERE–2014–BT–STD–0048) are identified by "CAC ECS" preceding the comment citation. Further, comments specifically received during the CAC/HP ECS Working Group meetings are identified by "CAC ECS: ASRAC Public Meeting" preceding the comment citation.

II. Synopsis of the Supplemental Notice of Proposed Rulemaking

In this SNOPR, DOE proposes revising the certification requirements and test procedure for CAC/HP based on public comment on various published materials and the ASRAC negotiation process discussed in section I.B. In this SNOPR, DOE proposes two sets of changes: One set of proposed changes to Appendix M effective 30 days after publication of a final rule and required for testing and determining compliance with current energy conservation standards; and another set of proposed changes to create a new Appendix M1 that would be used for testing to demonstrate compliance with any amended energy conservation standards (agreed to be January 1, 2023 by the Working Group in the CAC rulemaking negotiations (CAC ECS: ASRAC Term Sheet, No. 76)). DOE requests comment on whether representations in accordance with Appendix M1 should be permitted prior to the compliance date of any amended energy conservation standards. DOE does not expect the proposed changes to Appendix M to change measured efficiency. However, DOE has determined that the proposed procedures in the new Appendix M1 would change measured efficiency.

In this SNOPR, DOE proposes the following changes to certification requirements:

(1) Certification of the indoor fan off delay used for coil-only tests.

(2) Codifying the CAC/HP ECS Working Group's recommendation regarding delayed implementation of testing to demonstrate compliance with amended energy conservation standards;

(3) Relaxing the requirement that a split system's tested combination be a high sales volume combination;

(4) Revising requirements for certification of multi-split systems in light of the proposed adoption of multiple categories of duct pressure drop that the indoor units can provide;

(5) Making explicit certain provisions of the service coil definition;

(6) Certification of separate individual combinations within the same basic model for each refrigerant that can be used in a model of split system outdoor unit without voiding the warranty; and

(7) Certification of details regarding the indoor units with which unmatched outdoor units are tested.

DOE proposes the following changes to Appendix M:

(1) Establishment of a 4-hour or 8-hour delay time before the power measurement for units that require the outdoor temperature setting to reach thermal equilibrium;

(2) A limit on the internal volume of lines and devices connected to measure pressure at refrigerant circuit locations where the refrigerant state can switch from liquid to vapor for different test operating conditions;

(3) Requiring bin-by-bin EER and coefficient of performance (COP) interpolations for all variable speed units, to calculate performance at intermediate compressor speeds;

(4) Requiring a 30-minute test without the outside-air apparatus connected (a "non-ducted" test) to be the official test as part of all cooling and heating mode tests which use the outdoor air enthalpy method as the secondary measurement; and

(5) Imposing indoor coil size limits for split system ratings.

DOE proposes the following provisions for new Appendix M1:

(1) New higher external static pressure requirements for all units, including unique minimum external static pressure requirements for mobile home systems, ceiling-mount and wall-mount systems, low and mid-static multi-split systems, space-constrained systems, and small-duct, high-velocity systems;

(2) A unique default fan power for rating mobile home coil-only units and new default fan power for all other coil-only units;

(3) Revisions to the heating load line equation in the calculation of HSPF; and

(4) Amendments to the test procedures for variable speed heat pumps that change speed at lower ambient temperatures and a 5 °F heating mode test option for calculating full-speed performance below 17 °F.

If adopted, the test procedures proposed in this SNOPR to appendix M for subpart B to 10 CFR part 430 pertaining to the efficiency of CAC/HP would be effective 30 days after publication in the **Federal Register** (referred to as the "effective date"). Pursuant to EPCA, manufacturers of covered products would be required to use the applicable test procedure as the basis for determining that their products comply with the applicable energy conservation standards. 42 U.S.C. 6295(s)) On or after 180 days after publication of a final rule, any representations made with respect to the energy use or efficiency of CAC/HPs would be required to be made in accordance with the results of testing pursuant to the amended test procedures. (42 U.S.C. 6293(c)(2))(42 U.S.C. 6293(c)(2))

If adopted, the test procedures proposed in this SNOPR for appendix M1 to subpart B of 10 CFR part 430 pertaining to the efficiency of CAC/HP would be effective 30 days after publication in the **Federal Register**. The appendix M1 procedures would be required to be used as the basis for determining that CAC/HP comply with any amended energy conservation standards (if adopted in the concurrent CAC/HP energy conservation standards rulemaking) and for representing efficiency as of the compliance date for those amended energy conservation standards.

As noted in section I.A, 42 U.S.C. 6293(e) requires DOE to determine to what extent, if any, the proposed test procedure would alter the measured energy efficiency and measured energy use. DOE has determined that some of the proposed amendments in the new Appendix M1 would result in a change in measured energy efficiency and measured energy use for CAC/HP. DOE is conducting a separate rulemaking to amend the energy conservation standards for CAC/HP, which will take into account the test procedure revisions in Appendix M1. (CAC ECS: Docket No. EERE–2014–BT–STD–0048)

III. Discussion

This section discusses the revisions to the certification requirements and test procedure that DOE proposes in this SNOPR.

A. Testing, Rating, and Compliance of Basic Models of Central Air Conditioners and Heat Pumps

1. Representation Accommodation

The CAC/HP ECS Working Group made certain recommendations related to the Appendix M1 test procedure, with a recommended compliance date of January 1, 2023, for representations based on Appendix M1. (Docket No. EERE–2014–BT–STD–0048, No. 76, Recommendation #7) While the June 2016 Test Procedure Final Rule adopted mandatory testing requirements for representations of all basic models [81 FR at 37050–37051; 10 CFR 429.16(b)(2)(i)], the Working Group recommended several accommodations for representations for split systems:

○ DOE will implement the following accommodation for representative values of split system air conditioners and heat pumps based on the M1 methodology:

○ By January 1, 2023, manufacturers of single-split systems must validate an AEDM that is representative of the amended M1 test procedure by:

■ Testing a single-unit sample for 20-percent of the basic models certified.

■ The predicted performance as simulated by the AEDM must be within 5 percent of the performance resulting from the test of each of the models.

■ Although DOE will not require that a full complement of testing be completed by January 1, 2023, manufacturers are responsible for ensuring their representations are appropriate and that the models being distributed in commerce meet the applicable standards (without a 5% tolerance).

○ By January 1, 2023, manufacturers must either determine representative values for each combination of single-split-system CAC/HP based on the M1 test procedures using a validated AEDM or through testing and the applicable sampling plan.

○ By January 1, 2023, manufacturers of multi-split, multi-circuit, or multi-head mini-split systems must determine representative values for each basic model through testing and the applicable sampling plan.

○ By July 1, 2024, each model of condensing unit of split system CAC/HP must have at least 1 combination whose rating is based on testing using the M1 test procedure and the applicable sampling plan.

(Docket No. EERE–2014–BT–STD–0048, No. 76, Recommendation #10)

DOE proposes to implement these recommendations, in their entirety, in 10 CFR 429.16 and 429.70.

2. Highest Sales Volume Requirement

The CAC/HP ECS Working Group recommended that DOE implement the following requirements for single-split-system air conditioners and suggested implementing regulatory text:

- Every combination distributed in commerce must be rated.

○ Every single-stage and two-stage condensing unit distributed in commerce (other than a condensing unit for a 1-to-1 mini split) must have at least 1 coil-only rating that is representative of the least efficient coil distributed in commerce with a particular condensing unit.

- Every condensing unit distributed in commerce must have at least 1 tested combination.

○ For single-stage and two-stage condensing units (other than condensing units for a 1-to-1 mini split), this must be a coil-only combination.

- All other combinations distributed in commerce for a given condensing unit may be rated based on the application of an AEDM or testing in accordance with the applicable sampling plan.

(Docket No. EERE–2014–BT–STD–0048, No. 76, Recommendation #7)

DOE addressed the first and third bullets in a final rule published on June 8, 2016, (June 2016 final rule), but at that time declined to implement the second bullet, which recommends removing the requirement that the tested combination be the highest sales volume combination (HSVC). DOE also received comments from non-working group members regarding this requirement. JCI commented that the current language used in Appendix M denoting the HSVC match cannot be determined with exact statistics and that it actually inhibits the adoption of new and promising advancements in product design. (CAC TP: JCI, No. 66 at p. 4) In contrast, Unico commented that, as an indoor coil manufacturer, it believes it to be important that the outdoor unit manufacturer continue to test and rate the HSVC, as this is an integral requirement for their AEDM to maintain accuracy. (CAC TP: Unico, No. 63 at p. 2)

DOE believes the CAC/HP ECS Working Group recommendation adequately addresses JCI's concern about using the HSVC as a tested combination. In response to Unico, DOE notes that the requirements adopted in the June 2016 final rule require independent coil manufacturers (ICMs) to test their own equipment. It is the ICM's own responsibility to ensure the accuracy of its AEDMs. ICMs may conduct additional testing or work with outdoor unit manufacturers (OUMs) as needed to do so. For these reasons, DOE is proposing to remove the requirement that the tested combination be the HSVC. DOE proposes to apply the requirements as recommended by the CAC/HP ECS Working Group to all single-split-system air conditioners and heat pumps, including space-constrained and small-duct, high-velocity, distributed in commerce by an OUM.

3. Determination of Certified Rating for Multi-Split, Multi-Circuit, and Multi-Head Mini-Split Systems

In the June 2016 final rule, DOE modified the testing requirements for multi-head mini-split systems and multi-split systems, and added similar requirements for testing multi-circuit systems. DOE also clarified that these requirements apply to variable refrigerant flow (VRF) systems that are single-phase and less than 65,000 Btu/h.[5] For all multi-split, multi-circuit, and multi-head mini-split systems, DOE required that, at a minimum, each model of outdoor unit must be tested as part of a tested combination (as defined at 10 CFR 430.2) that includes only non-ducted indoor units. For any models of outdoor units also sold with ducted indoor units, a second "tested combination" including only ducted indoor units must be tested. DOE also allowed for manufacturers to rate a mixed non-ducted/ducted combination as the mean of the represented values for the tested non-ducted and ducted combinations, and allowed manufacturers to test and rate specific individual combinations as separate basic models, even if they share the same model of outdoor unit. 81 FR 37003–37005 (June 8, 2016)

DOE also added a requirement that for any models of outdoor units also sold with models of small-duct, high velocity (SDHV) indoor units, a "tested combination" composed entirely of SDHV indoor units must be used for testing and rating. However, such a system must be certified as a different basic model. Finally, DOE allowed mix-match ratings for SDHV and other non-ducted or ducted indoor units based on an average of the ratings of the two individual indoor unit types. 81 FR 37004 (June 8, 2016)

In the June 2010 NOPR, DOE had proposed lower minimum external static pressure (ESP) requirements for ducted multi-split systems (75 FR at 31232), and in the November 2015 SNOPR, DOE proposed to implement these requirements using the term "short duct systems," which could refer to multi-split, multi-head mini-split, or multi-circuit systems with indoor units that produce a limited level of external static pressure. 80 FR at 69314 (Nov. 9, 2015). In response to the SNOPR, DOE received several comments regarding its terminology and testing requirements related to short-duct systems as well as requests for changing terminology and testing requirements to include low-static and mid-static systems, as recommended in the CAC/HP ECS Working Group Term Sheet. Therefore in the June 2016 final rule, DOE maintained the existing ducted system terminology and is addressing the earlier comments from stakeholders and recommendations from the Working Group in this SNOPR.

Unico supported DOE's definition of short-ducted systems which would create four indoor unit types for multi-split systems: Short-ducted (previously described as "ducted"), conventional ducted, SDHV-ducted, and non-ducted. (CAC TP: Unico, No. 63 at p. 11) In the Term Sheet, the CAC/HP ECS Working Group recommended that DOE define "low-static system" and "mid-static system" as discussed in section III.C.1. (CAC ECS: Docket No. EERE–2014–BT–STD–0048, No. 76 at p. 1–2) These systems are essentially sub-categories of DOE's earlier proposal for short-ducted systems.

In addition, several stakeholders commented that multi-split systems may also be paired with models of conventional ducted indoor units. UTC/Carrier commented that some manufacturers also offer ducted units with external static pressure capabilities greater than 0.65 in w.c., the maximum external static pressure proposed by the Working Group for mid-static ducted units and recommended that DOE also include a requirement for separate multi-split system ratings with these "standard" ducted indoor units. (CAC TP: UTC/Carrier, No. 62 at p. 3–4)

Rheem commented that the definition of multi-split system is not limited to a specific duct configuration and that testing of all possible duct configurations should be considered. Rheem further commented that the testing requirements should be the same as single-split systems using conventional ducted indoor units because multi-split systems duct losses are the same as the standard single-split system. (CAC TP: Rheem, No. 69 at p. 5)

NEEA and NPCC commented that multi-split systems paired with more conventional blower coil indoor units should be testable with the external static pressure conditions specified for conventional blower coil units. (CAC TP: NEEA and NPCC, No. 64 at p. 3–4)

The California IOUs commented that additional testing is needed to ensure that the AEDM gives accurate ratings for all of the possible combinations when an outdoor unit of a multi-split system is paired with a conventional central forced air indoor unit. They said that, at present, a variable speed, mini-split outdoor unit is connected to an indoor unit(s) from the same manufacturer with complex software controls that produce the variable modes of operation needed to respond to indoor and outdoor conditions. They also asserted that the indoor units can be short ducted or ductless cassettes. Finally, they commented that, if the same outdoor section is installed with a central forced air unit, it will have indoor fan operation modes and significantly different power draw and may not be representative of the nuanced behavior of the ductless and short duct components. (CAC TP: California IOUs, No. 67 at p. 3)

Given the multiple types of indoor units with which these systems can be paired, several stakeholders also made recommendations related to the testing and rating requirements.

Unico commented that multi-split ratings should be listed with homogeneous type of indoor units, which should be based on tests or a valid AEDM. Unico commented that short-ducted, conventional-ducted, SDHV-ducted and non-ducted are different types and should all be tested and rated using the appropriate test procedure for the type, and that ratings with mixed types should be an average. (CAC TP: Unico, No. 63 at p. 2)

Mitsubishi proposed that given the potential additional testing requirements presented for systems with multiple families of ducted indoor unit (low-static, mid-static and standard-static ducted), a manufacturer be allowed to produce tested combinations of all low-static, all mid-static or all standard-static indoor units, and that, if they do not wish to have separate ratings, they must use the highest rating of external static pressure to establish the tested combination. (CAC TP: Mitsubishi, No. 68 at p. 3)

Goodman suggested that any combinations of non-ducted, low-static, mid-static and/or high-static indoor units be based on the highest static units in the combination if a single rating is to be used for all short-ducted indoor units. In addition, Goodman stated that it believes these combinations should have the capability of being rated and certified using either test data or an AEDM. Goodman suggested that, if multiple combinations of non-ducted, low-static, mid-static and/or high-static indoor units are matched with a particular outdoor unit, the testing should be performed using the appropriate test static for each indoor unit. (CAC TP: Goodman, No. 73 at p. 13–14)

DOE supports the Working Group recommendations to replace its proposal to use the terminology short-duct with low-static and mid-static. The proposed definitions for these terms are discussed in section III.C.1. In addition, DOE agrees that multi-split, multi-head mini-split, or multi-circuit systems can include conventional ducted indoor units. DOE notes that the proposed test procedure allows selection of an appropriate external static pressure for this case.

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[5] A VRF system is a multi-split system with at least three compressor capacity stages, but most VRF systems have variable-speed compressors.

After reviewing the comments, DOE proposes that multi-split, multi-head mini-split, and multi-circuit systems can be tested and rated with five kinds of indoor units: Non-ducted, low-static ducted, mid-static ducted, conventional ducted, or SDHV. However, DOE agrees that if a manufacturer offers an outdoor model with all five kinds of indoor units, a requirement to determine a rating through testing of each could be burdensome. Therefore, DOE proposes that, when determining represented values including certifying compliance with amended energy conservation standards, at a minimum, a manufacturer must test and rate a "tested combination" composed entirely of non-ducted units. If a manufacturer also offers the model of outdoor unit with models of low-static, mid-static, and/or conventional ducted indoor units, the manufacturer must at a minimum also test and rate a second "tested combination" with the highest static variety of indoor unit offered. The manufacturer may also choose to test and rate additional "tested combinations" composed of the lower static varieties. In each case, the manufacturer must test with the appropriate external static pressure. DOE believes that this option reduces test burden sufficiently and is not proposing use of AEDMs for these systems.

DOE proposes to maintain its requirement from the June 2016 final rule that, if a manufacturer also sells a model of outdoor unit with SDHV indoor units, the manufacturer must test and rate the SDHV system (*i.e.* test a combination with indoor units that all have SDHV pressure capability). DOE also proposes to continue to allow mix-match ratings across any two of the five varieties by taking a straight average of the ratings of the individual varieties, and to allow ratings of individual combinations through testing. As noted in the June 2016 final rule, SDHV represented values must be a separate basic model. Any represented values for a mixed system including SDHV and another style of unit must be in the same basic model as the SDHV model. Tables III.1 and III.2 summarize example represented values.

Table III.1 Example Represented Values for Non-SDHV Multi-Split Systems

Basic Model	Indiv. Model # (Outdoor Unit)	Indiv. Model #(s) (Indoor Unit)	Sample Size	Non-ducted Rep. Value	Conv. Ducted Rep. Value	Mid-Static Rep. Value	Low-Static Rep. Value	Mix Rep. Value (ND/CD)	Mix Rep. Value (ND/MS)	Mix Rep. Value (ND/LS)	Mix Rep. Value (CD/MS)	Mix Rep. Value (CD/LS)
ABC	ABC	***	4	15.00	14.00	-	-	14.50	-	-	-	-
ABC -ND1	ABC	2-A123; 3-JH746	2	17.00	-	-	-	-	-	-	-	-
XYZ	XYZ	***	8	15.50	14.00	14.50	15.00	14.75	15.00	15.25	14.25	14.50

TABLE III.2—EXAMPLE REPRESENTED VALUES FOR SDHV MULTI-SPLIT SYSTEMS

Basic model	Individual model No. (outdoor unit)	Individual model No.(s) (indoor unit)	Sample size	SDHV rep. value	Mix rep. value (ND)	Mix rep. value (CD)	Mix rep. value (MS)	Mix rep. value (LS)
ABC–SDHV	ABC	* * *	6	11.50	13.25	12.75	....	....

4. Service Coil Definition

In the June 2016 final rule, to distinguish newly installed cased and uncased coils from replacement cased and uncased coils, DOE added a definition for service coils and explicitly excluded them from indoor units in the indoor unit definition:

> *Indoor unit* means part of a split-system air conditioner or heat pump that includes (a) an arrangement of refrigerant-to-air heat transfer coil(s) for transfer of heat between the refrigerant and the indoor air and (b) a condensate drain pan, and may or may not include (c) sheet metal or plastic parts not part of external cabinetry to direct/route airflow over the coil(s), (d) a cooling mode expansion device, (e) external cabinetry, and (f) an integrated indoor blower (*i.e.* a device to move air including its associated motor). A separate designated air mover that may be a furnace or a modular blower (as defined in Appendix AA to the subpart) may be considered to be part of the indoor unit. A service coil is not an indoor unit.
>
> *Service coil* means an arrangement of refrigerant-to-air heat transfer coil(s) and condensate drain pan that may or may not include sheet metal or plastic parts to direct/route airflow over the coil(s), external cabinetry, and/or a cooling mode expansion device, and is sold exclusively to replace an uncased coil or cased coil that has already been placed into service and is labeled accordingly.

In this SNOPR, DOE proposes to modify the adopted definition of service coil to more explicitly define what "labeled accordingly" means. Under 42 U.S.C. 6295(r), the Secretary may include any requirement which the Secretary determines is necessary to assure that each covered product to which such standard applies meets the required minimum level of energy efficiency or maximum quantity of energy use specified in such standard.

In this specific case, DOE believes service coils must be distinguished from indoor units to ensure compliance with the applicable energy conservation standards for central air conditioners and heat pumps. Specifically, DOE proposes that a manufacturer must designate a service coil as "for indoor coil replacement only" on the nameplate and in manufacturer product and technical literature. In addition, the model number for any service coil must include some mechanism (*e.g.*, an additional letter or number) for differentiating a service coil from a coil intended for an indoor unit.

5. Efficiency Representations of Split-Systems for Multiple Refrigerants

Split-system CAC/HP are required to be tested as a system. Prior to the June 2016 final rule, the condensing unit was required to be tested with "the evaporator coil that is likely to have the largest volume of retail sales with the particular model of condensing unit" (commonly referred to as the highest sales volume combination or HSVC). 10 CFR 429.16(a)(2)(ii) as of January 1, 2016. The June 2016 final rule amended the definition of "central air conditioner or central air conditioning heat pump" to recognize instances in which there is no HSVC, *i.e.*, an outdoor unit is sold separately with no matching indoor unit, referred to as an "outdoor unit with no match". 81 FR at 36999 (June 8, 2016).

As discussed in the June 2016 final rule, outdoor units with no match are typically a result of the phase-out of HCFC-22 refrigerant. Effective January 1, 2010, the U.S. Environmental Protection Agency (EPA) banned the sale and distribution of those central air conditioning systems and heat pump systems that are designed to use HCFC-22 refrigerant. 74 FR 66450 (Dec. 15, 2009). EPA's rulemaking included an exception for the manufacture and importation of replacement components, as long as those components are not pre-charged with HCFC-22. Id. at 66459–60. Because complete HCFC-22 systems can no longer be distributed, DOE established test procedure requirements for outdoor units that have "no match," or are not sold with a matching indoor unit, which includes those units designed to use HCFC-22.

The "no match" test procedure's goal is that the test should produce measurements of energy efficiency during a representative average use cycle (see 42 U.S.C. 6293(b)(3)) while also ensuring that any field-matched combination (including the new "no-match" outdoor unit and an existing indoor unit) meets the standard. Due to the nature of these no-match systems, however, neither the manufacturer nor DOE knows exactly what the paired system will be for an outdoor unit with no match. To ensure compliance, DOE established indoor unit specifications that are representative of a less efficient unit (representative of units on the market at the time of the change in EPA regulations) that could be paired with the given outdoor unit with no match. Specifically, DOE established a requirement that outdoor units without a matching indoor unit must be tested with an indoor unit with a normalized gross indoor fin surface (NGIFS)[6] no higher than 1.0 square inches per British thermal unit per hour (sq. in./Btu/hr). 81 FR at 37010 (June 8, 2016).

In response to the phase-out of HCFC-22, one course pursued by manufacturers has been to use the refrigerant R-407C, which can be used as a drop-in replacement for HCFC-22 if oil compatibility issues are addressed. (No. 1 at pp. 2–6) Because R-407C is a replacement for HCFC-22, it is possible for a central air conditioner to operate either with R-407C or with HCFC-22. Such a unit could be shipped charged with R-407C, or shipped without the refrigerant charge (*i.e.*, dry-shipped). A dry-shipped unit could then either be sold as part of an R-407C split-system, or sold as a replacement component and charged with HCFC-22. In any case, R-407C outdoor units are often marketed as replacements for HCFC-22 outdoor units, as indicated in marketing material. (Docket No. EERE–2016–BT–TP–0029–0007, –0008, –0009, –0010, –0011, –0012 and –0013) Some R-407C outdoor units are more explicitly marketed as HCFC-22 replacements than other units (*e.g.*, indicating that the outdoor unit is "compatible with R-22 coils and linesets!"). ((Docket No. EERE–2016–BT–TP–0029–0010 at p. 1).

To address instances in which the manufacturer indicates that more than one refrigerant is acceptable for use in a unit (*i.e.*, the manufacturer specifications include use of multiple refrigerants or the warranty would not be voided by the use of more than one refrigerant), DOE is proposing that a split-system air conditioner or heat pump, including outdoor unit with no match, must be certified as a separate individual combination (including outdoor unit without match as applicable) for every acceptable refrigerant. Specifically, each individual combination (including outdoor unit without match corresponding to each acceptable refrigerant) would be certified under the same basic model. DOE's existing requirements for basic models would continue to apply; therefore, if an individual combination or an outdoor unit with no match fails to meet DOE's energy conservation standards using any refrigerant indicated by the manufacturer to be acceptable, then the entire basic model would fail. DOE also proposes that manufacturers must certify the refrigerant for every individual combination that is distributed in commerce (including every outdoor unit with no match). For models where the manufacturer only indicates one acceptable refrigerant (DOE expects this to be the majority of units), this proposal would simply entail certifying to DOE the refrigerant for which the model is designed. Finally, DOE proposes that if a model of outdoor unit (used in a single-split, multi-split, multi-circuit, multi-head mini-split, and/or outdoor unit with no match system) is distributed in commerce without a specific refrigerant specified or not charged with a specified refrigerant from the point of manufacture, a manufacturer must determine the represented value as an outdoor unit with no match.

Under this proposal, if an outdoor unit manufacturer (OUM) indicates as an acceptable refrigerant for a model of outdoor unit a refrigerant that is banned for inclusion in CAC/HP distributed as systems, such as HCFC-22, the OUM would have to determine represented values (*e.g.*, SEER) for the model of outdoor unit tested as an outdoor unit with no match. Within the same basic model, the manufacturer must determine a represented value for all individual split-system combinations using the same model of outdoor unit for any acceptable refrigerants with which the model of outdoor unit can legally be sold as a system. DOE has tentatively determined that specification by an OUM as to the acceptable refrigerant indicates the ultimate use or uses for which the unit was designed and manufactured.

Inclusion of HCFC-22 as an acceptable refrigerant by the manufacturer indicates that the model of outdoor unit was designed and manufactured to be sold separately as a replacement component (*i.e.*, as a model of outdoor unit with no match), because manufacturers are prohibited from selling and distributing central air conditioning systems and heat pump systems that use HCFC-22 refrigerant, except as replacement components (*i.e.,* outdoor units with no match).

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[6] NGIFS is equal to normalized gross indoor fin surface (for a conventional fin-tube heat exchanger, two times fin length times fin width times the number of fins) divided by the system cooling capacity.

As indicated previously in this discussion, it is DOE's understanding that the listing of acceptable refrigerants also impacts the unit's warranty. In order for a unit to remain under warranty, the unit generally must be operated and maintained as recommended by the manufacturer. If a manufacturer indicates that HCFC-22 is an acceptable refrigerant, its use in an outdoor unit would not be expected to void the warranty. Again, DOE understands conformance with the warranty to be an indication of the intended use for which a model is designed and manufactured. Additionally, DOE understands that manufacturer literature for some models may not explicitly state which refrigerants may be used without voiding the warranty and may instead generally refer to specific refrigerant characteristics for the warranty to remain valid. If for such a case, HCFC-22 meets the specified characteristics, DOE's proposal would require that the manufacturer certify, within the same basic model, an individual split-system combination or outdoor unit with no match for each refrigerant that meet these warranty criteria or characteristics.

Under the certification requirements proposed in this SNOPR, an outdoor unit for which both R-407C and HCFC-22 are acceptable refrigerants would need to be certified as a split-system combination and as an outdoor unit with no match, with representations for each. Per DOE's regulations established in the June 2016 final rule, outdoor units with no match cannot be certified using an AEDM, and the model of outdoor unit must be tested with an indoor unit meeting specified criteria. 81 FR at 37051 (June 8, 2016). Therefore, for a model of outdoor unit for which both R-407C and HCFC-22 are acceptable refrigerants, the outdoor unit with no match (with HCFC-22) must be tested and certified. In addition, DOE proposes to require that any split-system combination (with R-407C) must also be tested. The proposed certification requirements would represent the energy efficiency of an outdoor unit during a representative average use cycle for each intended sales scenario (*i.e.,* either sold as a split system and installed with a new matching indoor unit, or sold as a replacement component and installed with a legacy indoor unit).

In addition, DOE recognizes that concerns regarding warrantee coverage for a given refrigerant may not be a concern for all installers and consumers. Consequently, DOE is concerned that the lack of explicit indication that a unit is acceptable for use with HCFC-22 may not prevent installation of such units with the refrigerants, if the installers and consumers have reasonable confidence that the unit can operate with this refrigerant. Because of the similarity of HCFC-22 and R-407C and the history of CAC/HP being used interchangeably with both of these refrigerants, this issue could very well arise for any unit certified and warranted for use with R-407C. Hence, DOE proposes that any outdoor unit intended for use in a split system with R-407C, *i.e.* any unit shipped with a charge of any amount of R-407C, would also have to be rated as an outdoor unit with no match.

Nearly all outdoor units of split systems are shipped with a quantity of refrigerant charge that is close to the required charge for installation. This has been confirmed by observation of units tested by DOE. Line sets for connecting indoor units to outdoor units also are sold with an appropriate pre-charge to compensate for the different amount of charge that remains in the lines of different-length line sets. During set-up, the refrigerant charge of the assembled system is adjusted, and the pre-charging of the components limits the amount of refrigerant that is needed to be added or removed in order to match the charging conditions specified in the manufacturer's installation instructions. Because of this general practice to ship outdoor units with close to full charge, DOE considers use of a charge quantity that is much less than the charge specified by the instructions to be equivalent to shipping a unit without refrigerant. Hence, DOE proposes to require a no-match rating for outdoor units that are shipped with a charge amount such that adjustment of charge as specified in manufacturer's instructions requires addition of more than one pound of refrigerant.

As an example illustrating the certification requirement proposals discussed in this section, assume a manufacturer advertises a model of outdoor unit for use with either HCFC-22 or R-407C.

In 10 CFR 430.2 (as amended in the June 2016 final rule), DOE defines "basic model" for OUMs as "all individual combinations having the same model of outdoor unit, which means comparably performing compressor(s) [a variation of no more than five percent in displacement rate (volume per time) as rated by the compressor manufacturer, and no more than five percent in capacity and power input for the same operating conditions as rated by the compressor manufacturer], outdoor coil(s) [no more than five percent variation in face area and total fin surface area; same fin material; same tube material], and outdoor fan(s) [no more than ten percent variation in air flow and no more than twenty percent variation in power input]." According to this definition, the model of outdoor unit intended to be sold with both HCFC-22 and R-407C would represent multiple individual combinations within the same basic model. Therefore, a manufacturer has to determine a represented value for each single-split-system combination (sold for use with R-407C) as well as determine a represented value for the outdoor unit with no match (sold for use with HCFC-22). *See* 10 CFR 429.16(a)(1) (as amended in the June 2016 final rule), 81 FR 36001, 37056 (June 8, 2016).

Paragraph 10 CFR 429.16(b)(2)(i) (as amended in the June 2016 final rule) details the minimum testing requirements for each basic model, specified by equipment category. In this SNOPR, DOE is proposing to further specify in that same paragraph that when a basic model spans listed categories, as in this example, multiple testing requirements apply. Therefore, the manufacturer would have to test at least one single-split-system combination as well as the model of outdoor unit with a model of coil-only indoor unit meeting the requirements of section 2.2e of Appendix M or M1 to subpart B of part 430 (*i.e.,* test as an outdoor unit with no match). Under 10 CFR 429.16(c)(1)(i) (as amended in the June 2016 final rule), any other single-split combinations within the basic model may be tested or rated using an AEDM according to the applicable requirements. 81 FR 36001, 37049 (June 8, 2016).

In the event that DOE determines a basic model is noncompliant with an applicable energy conservation standard, DOE may issue a notice of noncompliance determination that, among other things, informs the manufacturer of its obligation to cease distribution of the basic model immediately. (10 CFR 429.114(a)) Therefore, if any individual combination (including the outdoor unit with no match) fails to comply with the applicable standard, whether the combination has been tested or rated using an AEDM, the entire basic model must be removed from the market and the model of outdoor unit may not be sold at all.

DOE also notes that although the discussion in this section of the SNOPR is directly related to refrigerants, a basic model may span listed categories in other situations. For example, as mentioned in the June 2016 final rule, a model of outdoor unit may be sold both as part of a single-split system and as part of a multi-split system. 81 FR at 37005. In this case, the manufacturer would have to determine represented values within each of these categories as required by 429.16(a)(1) and would have to meet the testing requirements for each category in 429.16(b)(2)(i). Furthermore, if an individual combination that is either a single-split or multi-split system fails to comply with the standard, the model of outdoor unit may not be sold for use in either category.

DOE also proposes to add information to the items required to be provided in certification reports to address outdoor units with no match. The general certification requirements for air conditioners and heat pumps as amended in the June 2016 final rule already apply to outdoor units with no match. These requirements include reporting of SEER, the average off mode power consumption, the cooling capacity, the region(s) in which the basic model can be sold, HSPF (for heat pumps), and EER (for air conditioners), and non-public information including indoor air volume rate for the relevant operating modes (*e.g.,* full-load cooling, part-load cooling, full-load heating). 81 FR 36991, 37053 (June 8, 2016). In this SNOPR, DOE proposes to require reporting of additional non-public information for the indoor unit that is tested with an outdoor unit with no match. This would include the indoor coil face area, depth in the direction of airflow, fin density (fins per inch), fin material, fin style (*e.g.,* wavy or louvered), tube diameter, tube material, and numbers of tubes high and deep. These additional requirements would apply to outdoor units with no match, whether or not the outdoor unit was also certified as part of an individual combination.

Issue 1: DOE requests comment on its proposed certification requirements for outdoor units with no match. Also, DOE seeks comment on what fin style options should be considered as options for CCMS database data entry.

6. Representation Limitations for Independent Coil Manufacturers

In the June 2016 final rule, DOE discussed compliance with Federal (base national or regional) standards for CAC/HP. Specifically DOE cited a proposal in the November 2015 SNOPR to amend 10 CFR 430.32 to clarify that the least-efficient combination within each basic model must comply with the regional SEER and EER standards. 80 FR 69277, 69290 (Nov. 9, 2015). However, DOE declined to modify section 430.32 in the June 2016 final rule, instead stating that it would do so in the regional standards enforcement rulemaking. 81 FR 36991, 37012 (June 8, 2016). Instead, DOE adopted language in 10 CFR 429.16 specifying that a basic model may only be certified as compliant with a regional standard if all individual combinations within that basic model meet the regional standard for which that basic model would be certified and that an ICM cannot certify a basic model containing a representative value that is more efficient than any combination certified by an OUM containing the same outdoor unit. 81 FR at 37050.

In response to the June 2016 final rule, Advanced Distributor Products (ADP) and Lennox International submitted separate but essentially identical letters and AHRI submitted a similar letter (Docket No. EERE–2016–BT–TP–0029–0006, –0005, and –0003) stating that this language, while intended to define that ICM ratings cannot provide a means for an outdoor unit to span regions, is inconsistent with the Regional Standards ASRAC Working Group agreement (Docket No. EERE–2011–BT–CE–0077–0070). ADP, Lennox, and AHRI suggested that language proposed in the regional standards enforcement NOPR (80 FR 72389–72390), but not finalized, captured the enforcement working group intent and avoids inadvertent limitations on independent coil manufacturers. Mortex also submitted a letter (Docket No. EERE–2016–BT–TP–0029–0004) commenting on the same language, also stating that it seems inconsistent with agreements made during the Regional Standards ASRAC Working Group. Mortex suggested that the requirement be removed from the test procedure.

DOE did not adopt the language proposed in the regional standards enforcement NOPR in response to comments submitted in that rulemaking. DOE agrees, however, that the language adopted at 429.16 inadvertently constrains ICMs beyond the bounds agreed to in the Regional Standards ASRAC Working Group. Accordingly, DOE proposes to remove the sentence: "An ICM cannot certify a basic model containing a representative value that is more efficient than any combination certified by an OUM containing the same outdoor unit." and replace it with the following language in 429.16(a)(4)(i): An ICM cannot certify an individual combination with a rating that is compliant with a regional standard if the individual combination includes a model of outdoor unit that the OUM has certified with a rating that is not compliant with a regional standard. Conversely, an ICM cannot certify an individual combination with a rating that is not compliant with a regional standard if the individual combination includes a model of outdoor unit that an OUM has certified with a rating that is compliant with a regional standard.

Issue 2: DOE requests comment on its proposed language in 429.16 related to allowable ICM ratings and compliance with regional standards.

7. Reporting of Low-Capacity Lockout for Air Conditioners and Heat Pumps With Two-Capacity Compressors

The current SEER and HSPF equations (4.1–1 and 4.2–1) in the DOE test procedure for a CAC/HP having a two-capacity compressor require different calculations of quantities depending on whether the test unit would operate at low capacity, cycle between low and high capacity, or operate at high capacity in response to the building load (see sections 4.1.3 and 4.2.3). To determine which calculations to use for units that lock out low capacity operation at higher outdoor temperatures, the outdoor temperature at which the unit locks out low capacity operation must be known. Section 4.1.3 of Appendix M indicates that this information must be provided by the manufacturer. Similarly, a two-stage heat pump may lock out low capacity heating operation below a certain lock-out temperature, as indicated in section 4.2.3 of Appendix M. Therefore, DOE proposes to add language to require that the lock-out temperatures for such systems for both cooling and heating modes be provided in the certification report.

8. Represented Values of Cooling Capacity

In the November 2015 SNOPR, DOE proposed adding a requirement that the represented values of cooling capacity and heating capacity must be the mean of the values measured for the sample. In response, AHRI, Lennox, JCI, Ingersoll Rand, Goodman, UTC/Carrier, Nortek, and Rheem disagreed with the requirement that the represented capacity values must be the mean of the tested values, and recommended that DOE allow manufacturers to rate capacity conservatively. (CAC TP: AHRI, No. 70 at p. 10; Lennox, No. 61 at p. 8, 15; JCI, No. 66 at p. 15–16; Ingersoll Rand, No. 65 at p. 5; Goodman, No. 73 at p. 15; UTC/Carrier, No. 62 at p. 8; Nortek, No. 58 at p. 6; Rheem, No. 69 at p. 8) The commenters provided additional detail as summarized in the

June 2016 final rule. 81 FR 37014–15 (June 8, 2016).

After reviewing the comments, in the June 2016 final rule DOE required the represented value of cooling (or heating) capacity to be a self-declared value that is no less than 95 percent of the mean of the cooling (or heating) capacities measured for the units in the sample selected for testing or of the output simulated by the AEDM. DOE stated that this would allow manufacturers the flexibility to derate capacity with conservative values as requested by multiple commenters, while still providing consumers with information that is reasonably close to the performance they may expect when purchasing a system. *Id.;* 10 CFR 429.16(b)(3) and 429.16(d).

Upon review, DOE has determined that the regulatory text adopted allows for unlimited overrating of capacity but only underrating of 5 percent. Consequently, in this SNOPR, DOE is proposing to revise the regulatory text in three locations (10 CFR 429.16(b)(3), 10 CFR 429.16(d), 10 CFR 429.70(e)(5)(iv)) to allow a one-sided tolerance on cooling and heating capacity that allows underrating of any amount but only overrating up to 5 percent (*i.e.,* the certified capacity must be no greater than 105 percent of the mean measured capacity or the output of the AEDM), as intended in the June 2016 final rule. As adopted in that final rule, DOE would still use the mean of the measured capacities in its enforcement provisions.

Issue 3: DOE requests comment on its proposal to allow a one-sided tolerance on represented values of cooling and heating capacity that allows underrating of any amount but only overrating up to 5 percent.

B. Proposed Amendments to Appendix M Testing To Determine Compliance With the Current Energy Conservation Standards

In this SNOPR, DOE proposes revisions to appendix M to subpart B of 10 CFR part 430. This section provides a discussion of those proposed changes. DOE proposes to make these changes to Appendix M effective 30 days after publication of a final rule in the **Federal Register.** Representations related to the efficiency of CAC/HP basic models must be based on testing in accordance with the final rule procedures not later than 180 days following publication of the final rule.

1. Measurement of Off Mode Power Consumption: Time Delay for Units With Self-Regulating Crankcase Heaters

DOE finalized an off-mode test procedure in the June 2016 final rule. 81 FR, 36991, 37022–5 (June 8, 2016). However, DOE recognizes that the current regulations may not account for excessive variation in the test results for units with self-regulating crankcase heaters or for units where the crankcase heater power measurement could be affected by the ambient temperature. These potential variations could be due to the large thermal mass of the compressor and the resulting time required for the compressor temperature to reach equilibrium. Because the power input of a self-regulating heater would depend on the compressor temperature, the test result would depend on the temperature of the unit just prior to the test. If conducted shortly after the B test, which is one of the steady-state wet coil cooling-mode tests conducted in an 82 °F ambient temperature, the compressor would still be quite warm, and the measured power input would be significantly lower than if the test were conducted after the compressor equilibrates with the surrounding space temperature. DOE proposes further revision to the test procedure to resolve this issue. The proposal in this section would not impact the measured off-mode power input beyond potentially reducing variation in the measured result.

In the off-mode test procedure established in the June 2016 final rule, DOE established a test method for units with self-regulating crankcase heaters that called for start of the test in a room conditioned to 82 °F temperature, with the compressor at a temperature no lower than 81 °F. The room temperature is then adjusted at a rate of change of no more than 20 °F per hour to approach 72 °F for conducting a first heater power measurement, and then to approach a manufacturer-specified lower temperature, again at a rate of change no more than 20 °F per hour, before conducting the second power measurement. 81 FR at 37022 (June 8, 2016). A half-hour duration in the initial reduction in room temperature from 82 °F to 72 °F would be compliant with the prescribed 20 °F maximum temperature reduction rate. However, DOE testing shows that the time constant for compressor cooldown, or for approach to equilibrium of the power input a self-regulating crankcase heater attached to a compressor, is much longer than a half-hour. This issue would be exacerbated if the compressor has a sound blanket. Self-regulating crankcase heaters draw less power when they are warmer. Hence, if the temperature cooldown from 82 °F is initiated when the compressor is hot (*e.g.,* after running the B test), the compressor will still be very warm when the test is conducted, and the measured power input will be lower than for a test initiated with a compressor at the minimum 81 °F.

To determine the reasonable delay time for units to reach thermal equilibrium, DOE conducted tests using a 5-ton residential condensing unit. DOE connected a self-regulating crankcase heater to the compressor and measured heater power input, compressor shell temperature, and ambient temperature. DOE observed cooldown behavior and the corresponding increase in heater input power in a 60 °F environment both with and without a sound blanket covering the compressor after initially preheating the compressor to 120 °F to simulate warmup associated with refrigeration system operation. DOE used an exponential equation for the power input to the heater as a function of time to fit to the test data. The time constant for approach to equilibrium (time for the difference between the power input and the value it would attain after an infinite amount of time to drop by 63 percent) DOE observed in the tests was approximately 2 hours for tests without the sound blanket (bare shell) and 4 hours for tests with the sound blanket. DOE also observed that the crankcase heater power input generally approached to within 10 percent of its final value after passage of about two time constants (4 hours for bare-shell testing and 8 hours for sound blanket testing).

Based on the testing and analysis described in this preamble, DOE proposes adopting a time delay for testing units with self-regulating crankcase heaters or crankcase heating systems in which the heater control temperature sensor is affected by the heater. DOE proposes a 4-hour time delay for units where the compressors have no sound blanket, and an 8-hour time delay for units where the compressors do have sound blankets. The delay would take place after the room temperature reaches the lower target value and before making each of the power measurements (P_{1x} and P_{2x}). Also, the proposal would eliminate the 20 °F per hour room temperature reduction rate limit for any unit where ambient temperature can affect the measurement of crankcase heater power because the roughly half hour required for the temperature to transition at this rate from 82 °F to 72 °F would add unnecessarily to the compressor's equilibration time—equilibration would occur sooner if the ambient temperature more quickly drops to the final value rather than approaching it slowly.

Issue 4: DOE seeks comments from interested parties about its proposal to impose time delays to allow approach to equilibrium for measurements of off-mode power for units with self-regulating crankcase heaters. DOE requests comment regarding the 4-hour and 8-hour delay times proposed for units without and with compressor sound blankets, respectively.

2. Refrigerant Pressure Measurement Instructions for Cooling and Heating Heat Pumps

In DOE's current test procedures at Appendix M, refrigerant pressure measurement is required when using the refrigerant enthalpy method as the secondary capacity measurement (see section 2.10.3 of 10 CFR part 430, subpart B, appendix M). Refrigerant pressure measurement is also required for some methods for setting or confirming refrigerant charge (see section 2.2.5 of 10 CFR part 430, subpart B, appendix M), unless otherwise instructed by the manufacturer's installation instructions.

DOE is aware that the pressure measurement devices may be installed at a location where the refrigerant state switches between liquid and vapor under different cooling and heating modes. In this case, the actual refrigerant charge in the unit could be different under different modes due to the transfer of refrigerant to and from the extra internal volumes in the refrigerant pressure lines, connections, and transducers or gauges.

DOE is also aware that the refrigerant charge in pressure measurement systems may affect cyclic testing. In a cooling test, the liquid refrigerant in the liquid refrigerant pressure measurement system is cooler than the refrigerant in the condenser. For a system with a fixed orifice expansion device, allowing the cooler refrigerant from the pressure measurement systems to flow into the evaporator before the fan delay ends could affect the cyclic performance.

These issues have the potential to impact test reproducibility and repeatability, in particular for small capacity mini-split heat pump systems with low system refrigerant charges, depending on the differences in internal volumes of the tubing, connections, and transducers, particularly from one laboratory to the next.

As part of the compressor calibration method, ASHRAE 37–2009 section 7.4.2 provides instructions for making refrigerant pressure measurements. For equipment not sensitive to refrigerant charge, the pressure measurement instruments may be connected via pressure measurement lines to the refrigerant lines without requiring that any preliminary tests be conducted to confirm that displacement of refrigerant into the pressure lines does not affect performance. The test standard sets a threshold for sensitivity to refrigerant charge, indicating that for equipment that is not sensitive to the charge, the refrigerant pressure lines must not affect the total charge by more than 0.5%.

To limit the amount of refrigerant charge that can transfer to and from the pressure measurement system, DOE proposes to require manufacturers to limit the total internal volume of pressure lines and pressure measurement devices connected at locations that can switch states from liquid to vapor for different operating modes or conditions. Based on the ASHRAE 37–2009 precedent, DOE selected a maximum internal volume connected at these locations that would represent at most 0.5 percent of the total system charge for the lowest-charge systems for which DOE collected information. The proposed maximum total internal volume of the pressure lines, connections and gauges would be 0.25 cubic inches per 12,000 Btu/hr certified cooling capacity. DOE selected this maximum volume based on a survey of refrigerant charge in mini-split heat pumps with capacities ranging from 9,000 to 33,000 Btu/hr.

DOE notes that the charge adjustment approach prescribed by ASHRAE 37–2009 for systems that are sensitive to refrigerant charge would not resolve the issue of displacement of refrigerant into the pressure lines because that approach is based on steady-state testing, for which the displaced refrigerant would remain in the lines. The required adjustment would add that same amount of refrigerant so that the charge actively circulating in the refrigerant circuit would be the same as if no pressure lines had been connected. In the present case, where refrigerant would be displaced between heating and cooling mode or between cycles of a cyclic test, simply adding the "missing" charge would not resolve the issue.

The internal volume of pressure measurement lines and connections can be determined using the tubing inner diameter or internal volume values found on pressure gauge or transducer manufacturer specification sheets. However, DOE is aware that the manufacturer specification sheets may not provide the internal volume of pressure gauges or pressure transducers, and they may not be easy to measure. Thus, DOE proposes to use 0.1 cubic inches as the default internal volume for each pressure transducer and 0.2 cubic inches for each pressure gauge, if internal volume is not provided in specification sheets. DOE proposes to include this requirement in section 2.2 of 10 CFR part 430, subpart B, appendix M.

Issue 5: DOE requests comment on its proposal to limit the internal volume of pressure measurement systems for cooling/heating heat pumps where the pressure measurement location may switch from liquid to vapor state when changing operating modes and for all systems undergoing cyclic tests. DOE also requests comment specifically on (a) the proposed 0.25 cubic inch per 12,000 Btu/h maximum internal volume for such systems, and (b) the proposals for default internal volumes to assign to pressure transducers and gauges of 0.1 and 0.2 cubic inches, respectively.

3. Revised EER and COP Interpolation Method for Units Equipped With Variable Speed Compressors

In the current DOE test procedure specified in section 3.2.4 and 3.6.4 of 10 CFR part 430, subpart B, appendix M, the building load is determined as a function of temperature, for both cooling and heating. Units equipped with variable speed compressors are tested at full, intermediate and minimum speeds. In calculating SEER and HSPF for variable speed units, there are three possible scenarios: (a) When the building load requires less than the minimum-speed capacity, the unit cycles at the minimum compressor speed to meet the load; (b) when the load requires more than the maximum-speed capacity, the unit operates constantly at full load; and (c) when the unit operates at an intermediate speed to meet a building load that is between the minimum-speed and maximum-speed capacities. Three outdoor temperatures are calculated for cooling and/or heating units equipped with variable speed compressors to bound the conditions in which scenario c would apply. These three outdoor temperatures are the balance points (temperatures at which the building load and delivered capacity are equal) for operation at the tested minimum, intermediate, and full compressor speeds. For all variable speed units operating in cooling mode and non-multi-split variable speed units operating in heating mode, the unit's EER and COP are calculated using quadratic functions. These quadratic functions are determined based on the EER or COP evaluated for the three calculated outdoor temperatures representing the minimum, intermediate, and full speed balance points.

In a final rule published October 22, 2007, DOE adopted a different approach for multi-split heat pumps. 72 FR 59906 (October 2007 Final Rule). DOE determined in that final rule that the quadratic fit would not be well-suited for multi-split units because the intermediate speed initially defined for variable-speed units is not likely the peak efficiency point for multi-split units. (see 71 FR 41320, 41325 (July 20, 2006)). In addition to allowing multi-split manufacturers some flexibility in selecting intermediate speeds for testing, DOE also adopted in the October 2007 final rule a two-piece linear relationship to represent EER and COP vs. temperature, rather than the quadratic fit used for other variable-speed units. 72 FR 59906 (Oct. 22, 2007).

As discussed in section III.C.3.d, AHRI provided variable speed and two stage heat data (under a Non-Disclosure Agreement to DOE's contractor) to allow evaluation of the impact on the HSPF differential associated with the new heating load line equation. In reviewing AHRI's variable speed heat pump heating test data, DOE's contractor discovered that the quadratic interpolation in some cases provides very poor estimation of COPs in the intermediate-speed operating range—in some cases predicting higher or lower COP values than all of the measured COP results. DOE has found similar issues with prediction of the cooling EER using the quadratic function, although DOE has less cooling mode data to review, and the most egregious errors in EER prediction for cooling mode are not as bad as the observed COP errors. Nevertheless, DOE believes such issues could very well cause significant errors in calculation of SEER for variable-speed units.

In this SNOPR, DOE evaluated two alternative interpolation methods for calculating SEER and HSPF for variable-speed CAC/HP in addition to the current quadratic function approach: (1) The linear interpolation method which currently applies only to multi-split units in heating mode (section 4.2.4.2 of 10 CFR part 430, subpart B, appendix M); and (2) a bin-by-bin interpolation method. The bin-by-bin method uses interpolation of EER or COP for each temperature bin based on the estimates of capacity and power input for the specific bin temperature (EER is equal to cooling capacity divided by power input, while COP is proportional to heating capacity divided by power input). Under the bin-by-bin method, an interpolation factor is first calculated, which represents the compressor operating speed needed to achieve balance between house load and delivered capacity. For example, if, for the specific temperature bin, the heating load is between the minimum-speed capacity and the intermediate-speed capacity, the interpolation factor is equal to the difference between the heating load and the minimum-speed capacity divided by the difference between the intermediate-speed capacity and the minimum-speed capacity. This factor is then applied to the COP values to determine COP when operating at the speed needed to deliver the desired heating load. The desired load is divided by this COP to determine power input. The interpolation is between the minimum speed and the intermediate speed performance values if the load is between the minimum and intermediate-speed capacities, or between the intermediate speed and the full speed performance values, if the load is between the intermediate and full speed capacities.

DOE found that HSPFs calculated with the current quadratic method deviated from HSPFs calculated using the bin-by-bin method up to 7.4 percent and the linear interpolation method deviated up to 2.9 percent from the bin-by-bin method. Calculations conducted for cooling mode SEER showed that SEER for the quadratic method deviated from the SEER calculated for the bin-by-bin method up to 2.5 percent. DOE believes that the bin-by-bin interpolation method is the most accurate of the three approaches (*i.e.*, DOE's current quadratic approach and the two alternative approaches considered for this SNOPR), because it is based on the best estimates of performance at the different compressor speeds for the specific ambient temperature considered for each bin. Hence, DOE proposes to require use of the bin-by-bin interpolations for all variable speed units (including variable-speed multi-split and multi-head mini-split systems), to calculate performance when operating at an intermediate compressor speed to match the building cooling or heating load. Because DOE believes that the bin-by-bin method is the most accurate, DOE does not propose for all variable-speed systems to adopt the linear approach currently used for multi-split systems. DOE would implement this change by revising the intermediate speed EER and COP equations in section of 4.1.4.2 and 4.2.4.2 of appendix M of 10 CFR part 430 subpart B.

Issue 6: DOE requests comment on the proposal to require the use of a bin-by-bin method to calculate EER and COP for intermediate-speed operation for SEER and HSPF calculations for variable-speed units.

4. Outdoor Air Enthalpy Method Test Requirements

In DOE's current test procedure in Section 2.10 of appendix M to subpart B of part 430, the outdoor air enthalpy method is an allowable secondary test method for split systems and single-package units. DOE currently requires that the outdoor air-side test apparatus be connected to the outdoor unit and used for measurements for the outdoor air enthalpy method during the "official" test. Additionally, DOE requires a preliminary test be conducted prior to conduct of the official test, in which the unit operates without the outdoor air-side test apparatus connected. After operating without the apparatus, the apparatus is connected, and the apparatus exhaust fan speed is adjusted until performance is verified as consistent with performance prior to attaching the apparatus. Specifically, the unit must operate for 30 minutes without the apparatus connected, followed by at least five consecutive readings with the apparatus connected (with measurements taken at one-minute intervals). The apparatus exhaust fan speed must be adjusted so that the averages for the evaporator and condenser temperatures, or the saturated temperatures corresponding to the measured pressures, agree within ± 0.5 °F between the tests with and without the apparatus connected. Additionally, a preliminary test is only required prior to the first steady-state cooling mode test and the first steady-state heating mode test, as long as the outdoor fan operates during all cooling mode steady-state tests at the same speed and during all heating mode steady-state tests at the same speed. However, the test procedure requires that a preliminary test be conducted prior to each cooling mode test where a different fan speed is used, and a similar requirement applies for heating mode tests.

The outdoor air enthalpy method includes two steps in order to verify the capacity determined from the indoor air enthalpy method during the official test. However, DOE is concerned that the tolerances on achieving the same condensing and evaporating conditions in the tests with and without the airflow measurement apparatus attached inherently introduces variability to the test results that could be eliminated by shifting to an official test with the apparatus not attached. DOE proposes to make such a change for the official test.

In this SNOPR, DOE proposes to require two-step measurements in the outdoor air enthalpy method only for cooling and heating mode tests that currently require preliminary tests (*i.e.,* the first cooling mode and heating mode tests, and any cooling mode and heating mode tests where a different outdoor fan speed is used). For example, if the unit uses a different outdoor fan speed for each test, the two-step approach would be required for each test condition. On the other hand, if the unit is a single-capacity unit and the outdoor fan uses the same fixed speed for all tests, the two-step approach would be required only for the A and H1 tests. DOE proposes that for all cooling and heating mode tests, a 30-minute test be conducted without the outside-air apparatus connected (''non-ducted'' test). For tests that do not require measurements for the outdoor air enthalpy method, this 30-minute test non-ducted test would constitute the official test. For tests that do require measurements using the outdoor air enthalpy method, DOE proposes to maintain the current approach, except for changing designation of what constitutes the official test. First, the current 30-minute preliminary test would be conducted without the outside-air apparatus attached (now the ''non-ducted'' test). Next, the outside-air apparatus would be attached. For this test, now termed the ''ducted'' test, the airflow would be adjusted so that condensing and evaporating conditions are matched within tolerances, and five consecutive readings would be required (as is required for the current test) to verify the primary capacity measurements. For the tests that require measurements using the outdoor air enthalpy method, DOE proposes that the following conditions must be met for the test to be considered valid:

(1) The energy balance specified in section 3.1.1 of appendix M to subpart B of part 430 is achieved for the ducted test (*i.e.,* compare the capacities determined using the indoor air enthalpy method and the outdoor air enthalpy method).

(2) The capacities determined using the indoor air enthalpy method from the ducted and non-ducted tests cannot deviate more than 2.0 percent.

If the test is valid, the non-ducted test would be used as the official measurement for the specific test condition.

DOE believes that use of the outdoor air enthalpy method for only certain tests sufficiently measures and verifies the capacity determined from the indoor air enthalpy method, and that losing the benefit of two-step verification of the capacity determined during all of the official tests is outweighed by the three following benefits to DOE's proposal:

- *Better Representativeness of Field Use.* First, attachment of an apparatus for measurements for the outdoor air enthalpy method inherently affects the airflow pattern for the condenser (for example, by blocking any potential for partial recirculation of condenser discharge air to the inlet) and adds external static pressure for the outdoor fan to overcome. While DOE's procedure requires adjustment of apparatus exhaust fan speed to achieve similar performance to operation without the outdoor air-side apparatus, there is still a tolerance on this deviation in performance. Also, it may be impossible to exactly match no-discharge-duct performance—for example, if the discharge duct blocks partial air recirculation, total condenser fan airflow may have to be reduced to achieve the same condensing temperature, thus altering the condenser fan operating point. Therefore, DOE believes that removal of the requirement to connect the outdoor air-side test apparatus during the official test would allow for performance that better matches performance in the field.
- *Improved Test Reproducibility and Repeatability.* Second, to maintain similar performance to operation without the outdoor air-side apparatus, DOE currently requires that the apparatus exhaust fan speed be adjusted. Specifically, the averages for the evaporator and condenser temperatures, or the saturated temperatures corresponding to the measured pressures, must agree within ± 0.5 °F of the averages achieved when the apparatus was disconnected. However, if the outdoor air-side apparatus is connected during the official test, two different test labs could measure evaporate and condenser temperatures that differ by up to 1.0 °F when testing the same unit. This variation could, in turn, affect the measured cooling and/or heating capacity of the unit, and therefore would change the calculated SEER and/or HSPF. DOE believes that removing the ducted test requirement from the official test would reduce this variation in performance and therefore improve the reproducibility and repeatability of its test procedure.
- *Reduced Test Burden.* Third, for cooling mode and heating mode tests requiring a preliminary test, DOE's current test procedure requires a 30-minute non-ducted test and 5-minute ducted test be conducted as part of the preliminary test, in addition to the 30-minute official test. However, in DOE's proposal, separate 30-minute tests would not be required for the preliminary and official tests—only a single 30-minute non-ducted test would be performed as the official test, assuming the required tolerances and test conditions are met. DOE expects this removal of a required test to reduce the burden of testing units with the outdoor air enthalpy method as a secondary method.

Issue 7: DOE requests comment on its proposed modifications to requirements when using the outdoor air enthalpy method as the secondary test method, including its proposal that the official test be conducted without the outdoor air-side test apparatus connected.

5. Certification of Fan Delay for Coil-Only Units

In the cyclic dry-coil cooling-mode tests, the current regulatory text requires coil-only units to be tested with a time-delay relay. Section 3.5.1 of the current Appendix M states that the automatic controls that are normally installed with the test unit must govern the OFF/ON cycling of the air moving equipment on the indoor side. (10 CFR 430 Subpart B, App. M, 3.5.1) Under that section, the manufacturer is to control the indoor coil airflow for ducted coil-only units according to the rated ON and/or OFF delays provided by the relay. However, DOE understands that in typical installations, a time-delay relay, if it exists, would be part of the furnace function. DOE reviewed furnace product literature collected during the furnace fan rulemaking (see Docket Number EERE–2010–BT–STD–0011) representing a broad range of furnaces sold by major furnace manufacturers to determine whether they have time-delay relays available for cooling mode when installed with coil-only air conditioners. DOE found that in many furnace series, both old and new, from multiple manufacturers, cooling time delays are common, but they are exclusively used for the compressor off-cycle, and they have varying time-delay durations. Thus, DOE concludes that coil-only units are likely to be installed with time-delay relay control for cooling, but that the duration of the delay varies by furnace. DOE is proposing no change in the use of time delays for testing of coil-only units, but proposes to amend its certification report requirements to require coil-only ratings specify whether a time delay is included, and if so, the duration of the delay used. DOE would use the certified time delay for any testing to verify performance. Section 3.5.1 would indicate that the time delay used for testing of a coil-only system shall be as listed in the certification report.

Issue 8: DOE requests comments on its proposal to require certification reports for coil-only units to indicate whether testing was conducted using a time-delay relay to provide an off-cycle time delay, and the duration of the time delay.

6. Normalized Gross Indoor Fin Surface Area Requirements for Split Systems

DOE must establish test procedures that are reasonably designed to measure energy efficiency during a representative average use cycle as determined by DOE. (42 U.S.C. 6293 (b)(3)) DOE is aware that many potential combinations of single-split-system condensing units and indoor coils could be tested even if they are not typically installed as a combination. Ratings of single-split-system coil-only combinations, for which the outdoor unit and indoor unit are not typically installed as a combination, would not be representative of an average use cycle. The CAC/HP ECS Working Group discussed this concept and the potentially undesirable impacts of rating combinations that are not distributed in commerce or installed for consumers. Specifically, the CAC/HP ECS Working Group addressed ratings based on a combination using a blower coil indoor unit consisting of a low-efficiency condensing unit paired with an indoor blower with unusually low input power, a concept the participants referred to as a "golden blower." Such a combination would result in an inflated rating for a low-efficiency condensing unit that is not representative of its typical installed performance. (CAC ECS: ASRAC Public Meeting, No. 87 at p. 88) The concept of unrepresentative, high performance can apply to other design aspects of indoor units, such as units with an indoor coil size far larger than would be installed for the given system capacity. To help ensure that the test procedure results in ratings that are representative of average use, DOE proposes to include a provision that would prevent testing certain combinations that are not representative of single-split systems with coil-only indoor units that are commonly distributed in commerce.

Specifically, DOE proposes to limit the normalized gross indoor fin surface (NGIFS) for the indoor unit used for single-split-system coil-only tests be no greater than 2.0 square inches per British thermal unit per hour (sq.in./Btu/hr). NGIFS is equal to total fin surface multiplied by the number of fins and divided by system capacity. An NGIFS greater than 2.0 sq.in./Btu/hr indicates that the system combines a low-capacity condensing unit with a high capacity indoor coil, *e.g.,* a 1.5-ton condensing unit paired with a 5-ton indoor coil. First, a house requiring a 1.5-ton air conditioner would be expected to have a commensurately-sized furnace, and a much larger indoor coil may not fit with the furnace or the existing available space. Second, such a combination might have good rated efficiency, but would provide poor dehumidification performance, due to the elevation of coil surface temperature (potentially above incoming air dew point temperature) associated with the large coil surface area. Because of the size compatibility and poor dehumidification performance, DOE understands that systems with an NGIFS greater than 2.0 sq.in/Btu/hr are not typically installed.

DOE evaluated the NGIFS for a representative data set of single-split-system coil-only combinations currently offered in the market to set this value. DOE's dataset included close to 100 two, three, and five-ton single-split-system coil-only combinations from multiple manufacturers that represent a majority of market share and span the available range of efficiency. Testing with a NGIFS no greater than 2.0 sq.in/Btu/hr would still reflect approximately 95 percent of the split-system coil-only combinations reviewed by DOE. DOE understands a single-split-system coil-only combination with an NGIFS that exceeds 2.0 sq.in/Btu/hr to be unrepresentative because it is unlikely to be distributed in commerce, which is supported by the review of NGIFS values for numerous rated combinations, as noted previously.

Issue 9: DOE requests comment on its proposal to limit the NGIFS of tested coil-only single-split systems to 2.0 sq.in/Btu/hr.

7. Modification to the Test Procedure for Variable-Speed Heat Pumps

In the November 2015 SNOPR, DOE proposed several changes to the test procedure for variable-speed heat pumps. First, DOE proposed that the maximum compressor speed used for the test be fixed at the absolute maximum speed at which the compressor operates for the given operating mode (heating or cooling). In other words, the maximum compressor speed used in different cooling mode test conditions would be the same, equal to the absolute maximum speed used for cooling at any operating condition. DOE proposed a similar approach for heating, allowing for a different maximum speed than for cooling. 80 FR at 69307 (Nov. 9, 2015).

The June 2016 final rule discussed comments on this proposal, several of which indicated that the compressors of variable speed heat pumps very often operate at higher speeds at colder temperatures, which can enhance measured HSPF. 81 FR at 37029 (June 8, 2016). The comments indicated that for some of these heat pumps, the compressor cannot operate in a 47 °F ambient temperature at the same full speed that it uses in a 17 °F ambient temperature. Although DOE did not in that final rule modify the test procedure to allow different compressor speeds for the full-speed tests conducted at 17 °F, 35 °F, and 47 °F ambient temperatures, DOE did acknowledge that addressing this issue would improve the test method's representation of the improved performance of variable speed heat pumps that use higher speeds at lower temperatures, indicating that consideration would be given to such a test procedure revision in the future.[7] *Id.* In this SNOPR, DOE proposes such a test procedure revision.

The possible adoption of a 2 °F test for rating of variable speed heat pumps was proposed in the November 2015 SNOPR. 80 FR 69323 (Nov. 9, 2015) It was also discussed during the CAC/HP ECS Working Group meetings, ultimately leading to Recommendation #5 in the Term Sheet, that a 5 °F ambient temperature optional test be adopted for variable speed heat pumps under the new Appendix M1. (CAC ECS: ASRAC Term Sheet, No. 76 at p. 3) This proposed revision is discussed in greater detail in section III.C.4. Because the Appendix M1 test procedure changes would be required as the basis for efficiency representations on the effective date of any new energy conservation standards (January 1, 2023), the 5 °F test for variable speed heat pumps would not become an option for several years. Based on the stakeholder comments discussed in this preamble, some variable-speed heat pumps may be unable to operate as required by the appendix M procedure as finalized by the June 2016 final rule. In order to resolve this issue sooner than 2021, DOE proposes that the test procedure revisions to address it be adopted in appendix M rather than appendix M1. Hence, DOE proposes the following amendments for appendix M.

- A 47 °F full-speed test used to represent the heating capacity would be required and designated as $H1_N$. However, the 47 °F full-speed test would not have to be conducted using the same compressor speed (determined based on revolutions per minute (RPM) or power input frequency) as the full-speed tests conducted at 17 °F and 35 °F ambient temperatures, nor at the same compressor speeds used for the full-speed cooling test conducted at 95 °F. For Appendix M, the compressor speed for the 47 °F full-speed test would be at the manufacturer's discretion, except that it would have to be no lower than the speed used in the 95 °F full-speed cooling test. Prior to the June 2016 final rule amendments, the heating capacity was represented either by the $H1_2$ test (for which the compressor speed guidance was not explicit), or, if a manufacturer chose to conduct what was then the optional $H1_N$ test, this latter test (using the same compressor speed as the full-speed cooling mode test) represented the heating capacity. In the current proposal, heating capacity would be represented only by the $H1_N$ test, which would be mandatory, while the compressor speed would be at the manufacturer's discretion within a range from the speed used for the 95 °F full-speed cooling test to the speed used for the full-speed 17 °F test.

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[7] The June 2016 final rule also changed the terminology for the highest compressor speed from "maximum speed" to "full speed," as requested by several comments responding to the November 2015 SNOPR. 81 FR at 37030 (June 8, 2016).

- The full-speed tests conducted at 17 °F and 35 °F ambient temperatures would still have to use the same speed, which would be the maximum speed at which the system controls would operate the compressor in normal operation in a 17 °F ambient temperature, although the 35 °F full-speed test is and would remain optional.
- It would be optional to conduct a second full-speed test at 47 °F ambient temperature at the same compressor speed as used for the 17 °F test, if this speed is higher than the speed used for the $H1_N$ test described in this preamble. This test would be designated the $H1_2$ test. Because DOE does not expect that an $H1_N$ test would ever use a higher compressor speed than used for the full-speed 17 °F test, the test procedure would not provide for this situation.
- If no 47 °F full-speed test is conducted at the same speed as used for the 17 °F full-speed test, standardized slope factors for capacity and power input would be used to estimate the performance of the heat pump for the 47 °F full-speed test point for the purpose of calculating HSPF.
- The capacity measured for the $H1_N$ test would be used in the calculation to determine the design heating requirement.

Development of these proposals and decisions regarding their details is explained further below.

As discussed in the June 2016 final rule, DOE believes that extrapolations of performance to lower temperatures should be based on tests conducted at the same speed and used to estimate performance where there is a good expectation that the speeds are also the same or at least not very different. Hence, DOE believes that calculation of performance below 17 °F must be based on a same-speed extrapolation (or on an interpolation using measurements for a lower-temperature test, such as for the proposed 5 °F test discussed in section III.C.4). For those heat pumps which cannot operate in the 47 °F ambient temperature at the same compressor speed used for the 17 °F full-speed test, DOE proposes use of average performance trends to represent the 47 °F test point so that a representative same-speed extrapolation can be done.

DOE evaluated the 17 °F-to-47 °F same-speed performance trends of heat pumps based on several sources including the AHRI database, data for two stage and variable speed heat pumps provided to DOE's contractor by AHRI during the CAC/HP ECS meetings, and product data sheets for 51 single-package heat pumps. The ratios for capacity and power input for the 17 °F test condition as compared to the 47 °F test condition are presented in Table III.4. The AHRI database provides capacity information for both 17 °F and 47 °F test conditions, but not power input for both. DOE did not consider variable speed models from the AHRI database in this analysis because of questions about whether the compressor speeds were the same for both test conditions for tests of these units. For the data provided by AHRI during the CAC/HP ECS meetings, DOE evaluated the two stage units and the variable speed units with a capacity ratio within a narrow range, to be sure that the results for these units were based on use of the same speed for both test conditions. Evaluation of the data for single-package units shows that they have a significantly lower capacity ratio, but roughly the same power input ratio, as compared with split systems. Consequently, DOE is proposing in this SNOPR a different standard capacity slope factor for single-package units.

TABLE III.3—AVERAGE HEAT PUMP CAPACITY AND POWER INPUT RATIOS FOR 17 °F AND 47 °F TESTS

Data source	Capacity ratio (17 °F vs. 47 °F)	Power input ratio (17 °F vs. 47 °F)
AHRI Database, Single-Stage and Two stage	0.618	Not available.
Split-System		
Single-Package	0.558	
Data Provided by AHRI During ASRAC Meetings:		
Two stage	0.623	0.886.
Variable speed *	0.637	0.875.
Data Sheets for Single-Package Units	0.557	0.874.

* Just for VS units with capacity ratio between 0.59 and 0.67, indicating high probability that compressor speed was the same for both 17 °F and 47 °F tests.

Based on the reviewed data, DOE selected capacity ratios equal to 0.62 for split systems and 0.56 for single-package units in order to calculate capacity slope factors. Also, DOE selected 0.88 as the power input ratio to use for calculating the power input slope factor. DOE proposes adopting slope factors that would be multiplied by the capacity or power input measured for the 17 °F ambient temperature in order to obtain the slope of the evaluated parameter per degree temperature rise. For example:

Capacity Slope = $\dot{Q}_h^{k=2}(17) * CSF$

Where:

Capacity Slope is the change in capacity per change in temperature in Btu/h-°F,

$\dot{Q}_h^{k=2}(17)$ is the capacity measured in the $H3_2$ Test in Btu/h, and

CSF is the Capacity Slope Factor in 1/°F.

The CSF is calculated from the selected capacity ratio as follows:

$$CSF = \frac{1 - CR}{(30°F) * CR}$$

Where CR is the capacity ratio.

The resulting values for the capacity slope factors are 0.0204/°F for split systems and 0.0262/°F for single-package systems. DOE adopted a similar approach for development of the Power Slope Factor (PSF), which is calculated to be 0.00455/°F for all systems.

DOE proposes use of these slope factors for any variable speed heat pumps for which the 47 °F full-speed test cannot be conducted at the same speed (represented by RPM or power input frequency) used in the 17 °F full-speed test. The slope factors would be used for calculation of representative capacity and power for operation at 47 °F ambient temperature for the purposes of calculating HSPF.

As mentioned in this preamble, DOE proposes that the 17 °F test be conducted using the maximum speed at which the system controls would operate the compressor during normal operation in this ambient temperature. This would help to ensure that the test procedure be representative of field operation, since, for cold temperatures close to 17 °F, the heat pump would be expected to be operating at full speed to satisfy the high heating loads expected for these temperatures. Further, DOE proposes that the 35 °F full-speed test, if conducted, use the same compressor speed as the 17 °F test, so that the impact of frosting and defrost for this test is not masked by an adjustment in compressor speed.

Issue 10: DOE requests comments on its proposal to require that full-speed tests conducted in 17 °F and 35 °F ambient temperatures use the maximum compressor speed at which the system controls would operate the compressor in normal operation in a 17 °F ambient temperatures. DOE requests comment on the proposed approach of using standardized slope factors for calculation of representative performance at 47 °F ambient temperature for heat pumps for which the 47 °F full-speed test cannot be conducted at the same speed as the 17 °F full-speed test. Further, DOE requests comment on the specific slope factors proposed, and/or data to show that different slope factors should be used.

In addition, DOE proposes that the $H1_N$ test, at 47 °F ambient temperature, be conducted to represent nominal heat pump heating capacity, but that there would be no specific compressor speed requirement associated with it for Appendix M, except that it be no lower than the speed used for the 95 °F full-speed cooling test. If the $H1_N$ test does not use the same speed as is used for the 17 °F full-speed heating test, it would affect the HSPF calculation only through its influence on the design heating requirement, since the standardized slope factors would be used to represent full-speed heat pump performance. DOE proposes that the 47 °F full-speed test used to represent heat pump capacity would use the same maximum compressor speed that the control system would use during normal operation in 47 °F ambient temperatures in Appendix M1 (see section III.C.4) However, proposing flexibility in the selection of compressor speed for the test would be more consistent with the recent approach for measuring nominal heating capacity (prior to publication of the June 2016 final rule) because compressor speed requirements on the $H1_2$ test may not have been clearly defined at that time (see Appendix M to subpart B of part 430 as of January 1, 2016).

Issue 11: DOE requests comments on its proposal to allow the full speed test in 47 °F ambient temperature that is used to represent heat pump heating capacity, to use any speed that is no lower than used for the 95 °F full-speed cooling test for Appendix M.

8. Clarification of the Requirements of Break-in Periods Prior to Testing

In the June 2016 final rule, DOE maintained its proposal from the November 2015 SNOPR to allow manufacturers the option of specifying a break-in period to be conducted prior to testing under the DOE test procedure. DOE limited the optional break-in period to 20 hours, which is consistent with the test procedure final rule for commercial HVAC equipment (10 CFR 431.96). The duration of the compressor break-in period, if used, must be included in the certification report for CAC/HP (10 CFR 429.16). DOE also adopted the same provisions as the commercial HVAC rule regarding the requirement for manufacturers to record the use of a break-in period and its duration as part of the test data underlying their product certifications, the use for testing conducted by DOE of the same break-in period specified in product certifications, and use of the 20 hour break-in period for DOE testing of products certified using an AEDM. 81 FR at 37033 (Jun. 8, 2016).

Section 3.1.7 of Appendix M, "Test Sequence" indicates that manufacturers have the option to operate the equipment for a break-in period on to exceed 20 hours, and that this break-in period must be recorded in the test data underlying the certified rating if the manufacturer uses a break-in period. DOE has made reporting of the break-in period a certification report requirement. 81 FR at 37053 (June 8, 2016). Hence, the instructions to record the break-in period in the test report is not necessary in section 3.1.7. Also, DOE intends that tests conducted by third-party testing facilities should use the break-in period that is certified and proposes to modify the language to clarify that the certified break-in period is used for the test (whether conducted by a manufacturer or other party). DOE also proposes to clarify that each compressor should undergo the break-in according to the certified number of hours, for units with multiple compressors. Finally, DOE proposes to clarify that the break-in period should be conducted prior to the first 30 minutes test data collection period as required by the test methods in section 3 of Appendix M.

Issue 12: DOE requests comments on its clarifications regarding use of break-in, including use of the certified break-in period for each compressor of the unit, regardless of who conducts the test, prior to any test period used to measure performance.

9. Modification to the Part Load Testing Requirement of VRF Multi-Split Systems

In addition to the adopted portions of the AHRI Standard 1230–2010, DOE proposed additional provisions in the November 2015 SNOPR for testing of VRF Multi-Split Systems. This included a provision adopted as part of section 2.2.3.a of Appendix M in the June 2016 final rule requiring that for part load tests, the sum of the nominal heating or cooling capacities of the operational indoor units be within 5 percent of the intended system part load heating or cooling capacity. 81 FR at 37066 (June 8, 2016). DOE recognizes the intended system part load heating or cooling capacity is not clearly defined in the test procedure and that the sum of nominal capacities of the indoor units may very well be higher than the system part load capacity during the test (since the indoor units would be expected to be operating at part load, less than their nominal capacity, during a part load test). Therefore, DOE proposes to remove this 5 percent tolerance requirement.

Issue 13: DOE requests comments on removing from section 2.2.3.a of Appendix M the 5 percent tolerance for part load operation when comparing the sum of nominal capacities of the indoor units and the intended system part load capacity.

10. Modification to the Test Unit Installation Requirement of Cased Coil Insulation and Sealing

The June 2016 final rule provided instructions in 2.2.c of Appendix M for uncased coils, including instructions regarding the addition of internal insulation and/or sealing consistent with manufacturer's instructions. The section ends with a requirement that no extra insulating or sealing is allowed for cased coils. This statement was intended to indicate that no extra internal insulating or sealing is allowed. DOE believes that the statement as it stands may suggest that sealing is not allowed between a cased coil and its connections to inlet and outlet ducts. To prevent such confusion, DOE proposes to remove the statement about cased coils.

Issue 14: DOE requests comment on whether removing the statement about insulating or sealing cased coils in Appendix M, section 2.2.c would be sufficient to avoid confusion regarding whether sealing of duct connections is allowed.

C. Appendix M1 Proposal

The November 2015 SNOPR proposed to establish a new Appendix M1 to Subpart B of 10 CFR part 430, which would be required to demonstrate compliance with any new energy conservation standards. 80 FR 69278, 69397 (Nov. 9, 2015) In this SNOPR, DOE also proposes to establish a new Appendix M1. The appendix would include all of the test procedure provisions in Appendix M as finalized in the June 2016 final rule, all of the proposed changes to Appendix M that are discussed in section III.B, and all of the additional proposals discussed in this section III.C, which would be included only in the new Appendix M1. DOE proposes to make Appendix M1 mandatory for representations of efficiency starting on the compliance date of any amended energy conservation standards for CAC/HP (however, note that phase-in of testing requirements for certain proposed new requirements for split systems would be as discussed in section III.A.1).

1. Minimum External Static Pressure Requirements

Most of the CAC/HP in the United States use ductwork to distribute air in a residence, using either a fan inside the indoor unit or housed in a separate component, such as a furnace, to move the air. External static pressure (ESP) for a CAC/HP is the static pressure rise between the inlet and outlet of the indoor unit that is needed to overcome frictional losses in the ductwork. The external static pressure imposed by the ductwork affects the power consumed by the indoor fan, and therefore also affects the SEER and/or HSPF of a CAC/HP.

a. Conventional Central Air Conditioners and Heat Pumps

The current DOE test procedure[8] stipulates that certification tests for "conventional" CACs and heat pump blower coil systems (*i.e.*, CACs and heat pump blower coil systems which are not small-duct, high-velocity systems) must be performed with an external static pressure at or above 0.10 in. wc. if cooling capacity is rated at 28,800 Btu/h or less; at or above 0.15 in. wc. if cooling capacity is rated from 29,000 Btu/h to 42,500 Btu/h; and at or above 0.20 in. wc. if cooling capacity is rated at 43,000 Btu/h or more.

DOE did not propose revisions to minimum external static pressure requirements for conventional blower coil systems in the June 2010 test procedure NOPR, stating that new values and a consensus standard were not readily available.[9] 75 FR 13223, 31228 (June 2, 2010). However, between the June 2010 test procedure NOPR and the November 2015 test procedure SNOPR, many stakeholders submitted comments citing data that suggested the minimum external static pressure requirements were too low and a value of 0.50 in. wc. would be more representative of field conditions. These comments are summarized in the November 2015 test procedure SNOPR. 80 FR 69317–18 (Nov. 9, 2015). Ultimately, in the November 2015 SNOPR, DOE proposed to adopt, for inclusion into 10 CFR part 430, subpart B, appendix M1, for systems other than multi-split systems and small-duct, high-velocity systems, minimum external static pressure requirements of 0.45 in. wc. for units with a rated cooling capacity of 28,800 Btu/h or less; 0.50 in. wc. for units with a rated cooling capacity from 29,000 Btu/h to 42,500 Btu/h; and 0.55 in. wc. for units with a rated cooling capacity of 43,000 Btu/h or more. DOE reviewed available field data to determine the external static pressure values it proposed in the November 2015 test procedure SNOPR. DOE gathered field studies and research reports, where publically available, to estimate field external static pressures. DOE previously reviewed most of these studies when developing test requirements for furnace fans. The 20 studies, published from 1995 to 2007, provided 1,010 assessments of location and construction characteristics of CAC and/or heat pump systems in residences, with the data collected varying by location, representation of system static pressure measurements, equipment's age, ductwork arrangement, and air-tightness.[10] 79 FR 500 (Jan. 3, 2014). DOE also gathered data and conducted analyses to quantify the pressure drops associated with indoor coil and filter foulants.[11] The November 2015 test procedure SNOPR provides a detailed overview of the analysis approach DOE used to determine an appropriate external static pressure value using this data. 80 FR 69318–19 (Nov. 9, 2015). DOE did not consider revising the minimum external static pressure requirements for SDHV systems in the November 2015 test procedure SNOPR. DOE did, however, propose to establish a new category of ducted systems, short duct systems, which would have lower external static pressure requirements for testing. DOE proposed to define "short duct system" to mean ducted systems whose indoor units can deliver no more than 0.07 in. wc. external static pressure when delivering the full load air volume rate for cooling operation. 80 FR at 69314. DOE proposed in the November 2015 SNOPR to require short duct systems to be tested using the minimum external static pressure previously proposed in the June 2010 NOPR for "multi-split" systems: 0.03 in. wc. for units less than 28,800 Btu/h; 0.05 in. wc. for units between 29,000 Btu/h and 42,500 Btu/h; and 0.07 in. wc. for units greater than 43,000 Btu/h. 75 FR at 31232 (June 2, 2010)

In response to the November 2015 SNOPR, Lennox supported DOE's proposal to increase the minimum test static pressure to more accurately reflect field installation conditions. Lennox recommended that this level be set to 0.50 in. wc. for all capacities, commenting that the single set point simplifies the test procedure, is consistent with levels found in field studies, and avoids compliance issues related to minimum static pressure settings based upon capacity. (CAC TP:

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[8] Table 3 of 10 CFR part 430 subpart B appendix M.

[9] In the June 2010 NOPR, DOE proposed lower minimum ESP requirements for ducted multi-split systems: 0.03 in. wc. for units less than 28,800 Btu/h; 0.05 in. wc. for units between 29,000 Btu/h and 42,500 Btu/h; and 0.07 in. wc. for units greater than 43,000 Btu/h. 75 FR at 31232 (June 2, 2010).

[10] DOE has included a list of citations for these studies in the docket for the furnace fan test procedure rulemaking. The docket number for the furnace fan test procedure rulemaking is EERE–2010–BT–TP–0010.

[11] Siegel, J., Walker, I., and Sherman, M. 2002. "Dirty Air Conditioners: Energy Implications of Coil Fouling" Lawrence Berkeley National Laboratory report, number LBNL–49757.

ACCA. 1995. Manual D: Duct Systems. Washington, DC, Air Conditioning Contractors of America.

Parker, D.S., J.R. Sherwin, et al. 1997. "Impact of evaporator coil airflow in air conditioning systems" ASHRAE Transactions 103(2): 395–405.

Lennox, No. 61 at p. 11) Lennox also commented that improvements in field practices to reduce installed static pressure in parallel with optimizing products for lower static pressures are a more effective measure to optimize field performance and reduce energy consumption. Lennox commented that products optimized for increased static pressures will likely result in increased energy consumption. (Lennox, No. 61 at p. 11) Unlike Lennox, Rheem did not agree in its comments that the assumption of poorly designed ductwork should be built into the test procedure. (CAC TP: Rheem, No. 69 at p. 16)

Many interested parties supported the proposal to increase the external static pressure requirement. NEEA and NPCC commented that the minor adjustments on either side of 0.50 in. wc. on the basis of system capacity would be a needless complication of the test procedure because NEEA and NPPC's field data does not suggest any correlation between the external static pressure a system faces and the system capacity. (CAC TP: NEEA and NPCC, No. 64 at p. 8) The California IOUs recommended that all capacities use 0.50 in. wc. to simplify testing. (CAC TP: California IOUs, No. 67 at p. 2) ACEEE, NRDC, and ASAP fully supported adopting 0.50 in. wc. for all units (in blower coil configuration), as 0.5 in. wc. would be closer to the levels found in thousands of residential duct systems tested. (CAC TP: ACEEE, NRDC, ASAP, No. 72 at p. 4)

Lennox and Rheem commented that DOE's assumption that a CAC system would be poorly maintained, such as containing fouled coils and filters, should not be built into the test procedure. (CAC TP: Lennox, No. 61 at p. 19; Rheem, No. 69 at p. 16) Lennox further commented that any accommodation for poor field conditions should be administered equitably across all product types. (CAC TP: Lennox, No. 61 at p. 19) Rheem also commented that although dirty filters and fouled coils can increase system static, Rheem considers undersized duct work as the leading cause of high pressure drop measured in field applications. (CAC TP: Rheem, No. 69 at p. 16) Rheem believed that requiring higher minimum external static pressure would reduce published ratings, which could confuse installers and consumers. Rheem commented that a new energy metric should be introduced that would distinguish ratings based on appendix M from ratings based on appendix M1. The California IOUs commented that, as shown in the ACCA Manual D,[12] the filter pressure drop value of 0.20 in. wc. is normal, and supported DOE's proposal. (CAC TP: California IOUs, No. 67 at p. 6)

After discussions that included the concerns from the comments summarized previously in this section, the CAC/HP ECS Working Group members weighed in on appropriate minimum external static pressure requirements. (CAC ECS: CAC/HP ECS Working Group meeting, No. 86 at pp. 31–128) Recommendation #2 of the CAC/HP ECS Working Group Term Sheet states that the minimum required external static pressure for CAC/HP blower coil systems other than mobile home systems, ceiling-mount and wall-mount systems, low and mid-static multi-split systems, space constrained systems, and small-duct, high-velocity systems should be 0.50 in. wc. for all capacities. (CAC ECS: ASRAC Term Sheet, No. 76 at p. 2) In comments in response to the November 2015 SNOPR, Unico supported the values discussed during the ASRAC meetings. (CAC TP: Unico, No. 63 at p. 12) JCI and Carrier commented that this topic has already been resolved through the ASRAC meetings.[13] (CAC TP: JCI, No. 66 at p. 21; Carrier, No. 62 at p. 20)

Based on DOE's analysis and consistent with the CAC/HP ECS Working Group Term Sheet, DOE proposes to adopt, for inclusion into 10 CFR part 430, subpart B, appendix M1, for systems other than mobile home, ceiling-mount and wall-mount systems, low and mid-static multi-split systems, space-constrained systems, and small-duct, high-velocity systems, a minimum external static pressure requirement of 0.50 in. wc. DOE is aware that such changes will impact the certification ratings for SEER, HSPF, and EER and is addressing such impact in the current energy conservation standards rulemaking.[14] For this reason, DOE is not proposing to make this change in appendix M.

b. Non-Conventional Central Air Conditioners and Heat Pumps

In response to the November 2015 SNOPR and during the CAC/HP ECS Working Group negotiations, DOE also received comment regarding the minimum external static pressure requirements for mobile home systems, ceiling-mount and wall-mount systems, low and mid-static multi-split systems, space-constrained systems, and small-duct, high-velocity systems. In its comments, First Co. proposed to reduce the minimum static pressure for space-constrained and multi-family blower coils to 0.25 in. wc. or lower. (CAC TP: First Co., No. 56 at p. 2) The CAC/HP ECS Working Group included in its Final Term Sheet Recommendation #2, which is summarized in Table III.4 below. (CAC ECS: ASRAC Term Sheet, No. 76 at p. 2)

TABLE III.4—CAC/HP ECS WORKING GROUP RECOMMENDED MINIMUM EXTERNAL STATIC PRESSURE REQUIREMENT

Product description	Minimum external static pressure (in. wc.)
All central air conditioners and heat pumps except (2)–(7) below.	0.50.
(2) Ceiling-mount and Wall-mount Blower Coil System.	TBD by DOE.
(3) Manufactured Housing Air Conditioner Coil System.	0.30.
(4) Low-Static System	0.10.
(5) Mid-Static System	0.30.
(6) Small Duct, High Velocity System.	1.15.
(7) Space Constrained	0.30.

Recommendation #1 of the CAC/HP ECS Working Group included suggested definitions for distinguishing the CAC/HP varieties included in Recommendation #2 (Table III.4) to enable the proper administration of the CAC/HP ECS Working Group's recommended minimum external static pressure requirements.

Recommendation #1 stated:

- Suggested definitions capture the intent of the Working Group and DOE should adopt them as is or modify them in a manner that captures the same intent.
- For those definitions that contain a maximum external static pressure requirement, the unit's maximum external static pressure would be determined using a dry coil test without electric heat installed and without an air filter installed at the unit's certified airflow, or, if the airflow is not certified, at an airflow of 400 cfm per ton of certified capacity.
- For those condensing units distributed in commerce with different indoor unit combinations, each specific combination would need to meet the applicable definition in order to be rated with the associated static.

The CAC/HP ECS Working Group's recommended definitions are as follows:

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[12] *Manual D: Residential Duct Systems.* Arlington, VA: Air Conditioning Contractors of America (ACCA).

[13] The comment period for the November 2015 SNOPR was still open during the CAC/HP ECS Working Group negotiations.

[14] Docket No. EERE–2014–BT–STD–0048.

- A ceiling-mount blower coil system is a split-system central air conditioner or heat pump that contains a condensing unit and an indoor unit intended to be exclusively installed by being secured to the ceiling of the conditioned space, with return air directly to the bottom of the unit (without ductwork), having an installed height no more than 12 inches (not including condensate drain lines) and depth (in the direction of airflow) of no more than 30 inches, with supply air discharged horizontally. The certified cooling capacity must be less than or equal to 36,000 Btu/h.
- A wall-mount blower coil system is a split-system central air conditioner or heat pump that contains a condensing unit and an indoor unit intended to be exclusively installed by having the back side of the unit secured to the wall within the conditioned space, with capability of front air return (without ductwork) and not capable of horizontal airflow, having a height no more than 45 inches, a depth of no more than 22 inches (including tubing connections), and a width no more than 24 inches. The certified cooling capacity must be less than or equal to 36,000 Btu/h.
- Manufactured housing air conditioner coil system is a split-system air conditioner or heat pump that contains a condensing unit with an indoor unit that: (1) Is distributed in commerce for installation only in a manufactured home with the home and equipment complying with HUD Manufactured Home Construction Safety Standard 24 CFR part 3280; (2) has an external static pressure that must not exceed 0.4 inches of water; and (3) has an indoor unit that must bear a label in at least ¼ inch font that reads "For installation only in HUD Manufactured Home per Construction Safety Standard 24 CFR part 3280." Note, manufacturers must certify which combinations are manufactured housing air conditioner coil system.
- Low-static system means a ducted multi-split or multi-head mini-split system where all indoor sections produce greater than 0.01 and a maximum of 0.35 inches of water of external static pressure when operated at the full-load air volume rate not exceeding 400 cfm per rated ton of cooling.
- Mid-static system means a ducted multi-split or multi-head mini-split system where all indoor sections produce greater than 0.20 and a maximum of 0.65 inches of water of external static pressure when operated at the full-load air volume rate not exceeding 400 cfm per rated ton of cooling.

UTC/Carrier supported the low and medium static definitions as presented during the CAC/HP ECS Working Group meetings, in place of the short-duct unit definition DOE proposed in the November 2015 SNOPR. (CAC TP: UTC/Carrier, No. 62 at p. 3–4,19) AHRI and Mitsubishi recommended in their comments nearly identical definitions to those recommended in the CAC/HP ECS Working Group term sheet. (CAC TP: AHRI, No. 70 at p. 17; Mitsubishi, No. 68 at p. 2–3) Goodman generally supported the comments made by industry during the initial meetings of the CAC/HP ECS Working Group, in which additional sub-categories of "short-ducted" systems were proposed. Goodman recommended that DOE only include CAC/HP ECS Working Group's definitions and modifications to the test procedure in the "M1" test procedure and not part of "M" test procedure because the proposed modification to the test procedure would increase the measured energy consumption for those "short-ducted" systems being marketed under the current "M" test procedure. (CAC TP: Goodman, No. 73 at p. 6–7)

DOE agrees with the intent of Recommendation #1 and #2 of the CAC/HP ECS Working Group Term Sheet. DOE recognizes that the CAC/HP varieties included in these recommendations have unique installation characteristics that result in different field external static pressure conditions, and in turn, indoor fan power consumption in the field. While conventional split systems are typically installed in attics or basements and require long ductwork to deliver conditioned air to the conditioned space, ceiling-mount systems, wall-mount systems, space-constrained systems, low-static systems and mid-static systems are installed in or in closer proximity to the spaces they condition, typically requiring shorter ductwork than conventional split systems. The field external static pressure for these non-conventional systems is lower than the external static pressure for conventional split systems as a result. In this SNOPR, DOE proposes to adopt the CAC/HP ECS Working Group recommended minimum external static pressure requirements for space-constrained systems, low-static systems, and mid-static systems to be more reflective of field conditions for these reasons, with one modification. DOE understands that when some space-constrained outdoor units are paired with conventional indoor units, the minimum external static pressure requirement for space constrained systems recommended by the CAC/HP ECS Working Group, 0.30 in. wc., would not be appropriate for these installations. Therefore, DOE also proposes to limit the CAC/HP ECS Working Group recommended minimum external static pressure requirement for space-constrained systems only to space-constrained indoor units and single-package space-constrained units.

The CAC/HP ECS Working Group tasked DOE with the determination of the appropriate minimum external static pressure for ceiling-mount and wall-mount systems. During the CAC/HP ECS Working Group meetings, manufacturers of these systems suggested a minimum external static pressure requirement of 0.30 in. wc. (CAC ECS: CAC/HP ECS Working Group meeting, No. 88 at p. 31) However, the CAC/HP ECS Working Group did not adopt this as a recommendation primarily due to lack of time to thoroughly review the subject. DOE proposes to specify a minimum external static pressure requirement of 0.30 in. wc. for ceiling-mount and wall-mount systems, consistent with manufacturers' recommendations.

Mobile home[15] systems also have lower field external static pressure than conventional split systems. Mobile home systems are installed in homes that meet the HUD Manufactured Home Construction Safety Standard 24 CFR part 3280, which includes a maximum threshold of 0.30 in. wc. for the restrictiveness of ductwork. Consistent with these HUD requirements, the CAC/HP ECS Working Group recommendation, and the external static pressure requirements for mobile home systems in the DOE furnace fan test procedure, DOE proposes to adopt 0.30 in. wc. as the minimum external static pressure required for testing mobile home central air conditioning and heat pump systems.

In this SNOPR, DOE proposes to adopt the CAC/HP ECS Working Group recommendations for minimum external static pressure requirements for low-static and mid-static systems. By the definitions recommended by the Working Group, these systems are not capable of producing external static pressure significantly higher than the recommended minimum external static pressure requirements. Consequently, DOE expects that any system that would meet these definitions would be incapable of properly conditioning a home that has ductwork with an external static pressure significantly higher than the proposed minimum.

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[15] In previous rulemaking documents for the furnace fan test procedure and, DOE used the term "manufactured home" to be synonymous with "mobile home," as used in some definitions in the **Federal Register**. 10 CFR 430.2. DOE will use the term "mobile home" in place of "manufactured home" hereinafter to be consistent with the **Federal Register** definitions that use "mobile home", such as for "mobile home furnace." All provisions and statements regarding mobile homes and mobile home products are applicable to manufactured homes and manufactured home products.

The CAC/HP ECS Working Group did not recommend a change to the current minimum external static pressure required (1.15 in. wc.) for SDHV systems with a cooling or heating capacity between 29,000 to 42,500 Btu/h. However, the CAC/HP ECS Working Group recommended that 1.15 in. wc. also be used as the minimum external static pressure requirement for SDHV systems of all other capacities. Using a single minimum external static pressure value for all capacities of a given CAC/HP variety is consistent with the approach recommended by the Working Group for all CAC/HP varieties. DOE proposes to adopt the Working Group recommendation for the minimum external static pressure requirement for SDHV systems.

Table III.5 summarizes DOE's proposed minimum external static pressure requirements.

TABLE III.5—PROPOSED MINIMUM EXTERNAL STATIC PRESSURE REQUIREMENTS

CAC/HP Variety	Minimum external static pressure (in. wc.)
Conventional (*i.e.*, all central air conditioners and heat pumps not otherwise listed in this table)	0.50
Ceiling-mount and Wall-mount	0.30
Mobile Home	0.30
Low-Static	0.10
Mid-Static	0.30
Small Duct, High Velocity	1.15
Space-Constrained (indoor and single-package units only)	0.30

Issue 15: DOE requests comments on the proposed minimum external static pressure requirements.

DOE also agrees with the intent of the definitions recommended by the CAC/HP ECS Working Group. DOE proposes to adopt those definitions with minor modifications to make them consistent with other proposed regulatory language. For example, DOE is proposing to replace the term "condensing unit" in the CAC/HP ECS Working Group recommended definition for mobile home systems with the term "outdoor unit" to ensure that the definition applies to both mobile home air conditioners and heat pumps. DOE proposes to adopt the following definitions for the CAC/HP varieties included in Recommendations #1 and #2 in the CAC/HP ECS Working Group Term Sheet:

- *Ceiling-mount blower coil system* means a split system for which the outdoor unit has a certified cooling capacity less than or equal to 36,000 Btu/h and the indoor unit is shipped with manufacturer-supplied installation instructions that specify to secure the indoor unit only to the ceiling of the conditioned space, with return air directly to the bottom of the unit (without ductwork), having an installed height no more than 12 inches (not including condensate drain lines) and depth (in the direction of airflow) of no more than 30 inches, with supply air discharged horizontally.
- *Low-static blower coil system* means a ducted multi-split or multi-head mini-split system for which all indoor units produce greater than 0.01 in. wc. and a maximum of 0.35 in. wc. external static pressure when operated at the cooling full-load air volume rate not exceeding 400 cfm per rated ton of cooling.
- *Mid-static blower coil system* means a ducted multi-split or multi-head mini-split system for which all indoor units produce greater than 0.20 in. wc. and a maximum of 0.65 in. wc. when operated at the cooling full-load air volume rate not exceeding 400 cfm per rated ton of cooling.
- *Mobile home blower coil system* means a split system that contains an outdoor unit and an indoor unit that meet the following criteria: (1) Both the indoor and outdoor unit are shipped with manufacturer-supplied installation instructions that specify installation only in a mobile home with the home and equipment complying with HUD Manufactured Home Construction Safety Standard 24 CFR part 3280; (2) the indoor unit cannot exceed 0.40 in. wc. when operated at the cooling full-load air volume rate not exceeding 400 cfm per rated ton of cooling; and (3) the indoor unit and outdoor unit each must bear a label in at least ¼ inch font that reads "For installation only in HUD manufactured home per Construction Safety Standard 24 CFR part 3280."
- *Wall-mount blower coil system* means a split system for which the outdoor unit has a certified cooling capacity less than or equal to 36,000 Btu/h and the indoor unit is shipped with manufacturer-supplied installation instructions that specify to secure the back side of the unit only to a wall within the conditioned space, with the capability of front air return (without ductwork) and not capable of horizontal airflow, having a height no more than 45 inches, a depth of no more than 22 inches (including tubing connections), and a width no more than 24 inches (in the direction parallel to the wall).

c. Certification Requirements

DOE proposes to establish the certification requirements for Appendix M1 to require manufacturers to certify the kind(s) of CAC/HP associated with the minimum external static pressure used in testing or rating (*i.e.*, ceiling-mount, wall-mount, mobile home, low-static, mid-static, small duct high velocity, space constrained, or conventional/not otherwise listed). In the case of mix-match ratings for multi-split, multi-head mini-split, and multi-circuit systems, manufacturers may select two kinds. In addition, models of outdoor units for which some combinations distributed in commerce meet the definition for ceiling-mount and wall-mount blower coil system are still required to have at least one coil-only rating (which uses the 441W/1000 scfm default fan power value) that is representative of the least efficient coil distributed in commerce with the particular model of outdoor unit. Mobile home systems are also required to have at least one coil-only rating that is representative of the least efficient coil distributed in commerce with the particular model of outdoor unit. DOE proposes to specify a default fan power value of 406W/1000 scfm, rather than 441W/1000 scfm, for mobile home coil-only systems. Details of this proposal are discussed in detail in section III.C.2.

Issue 16: DOE requests comment on the proposed definitions for kinds of CAC/HP associated with administering minimum external static pressure requirements.

d. External Static Pressure Reduction Related to Condensing Furnaces

In the November 2015 SNOPR, DOE requested comment on its proposal to implement a 0.10 in. wc. reduction in the minimum external static pressure requirement for air conditioning units tested in blower coil (or single-package) configuration in which a condensing furnace is in the airflow path during the test. This issue was also discussed as part of the CAC/HP ECS Working Group negotiation process. ADP, Lennox, NEEA, NPCC, California IOUs, Rheem, ACEEE, NRDC, and ASAP did not support the proposal because it would make the ratings for units paired with condensing furnaces less reflective of field energy use. (CAC TP: ADP, No. 59 at p. 12; Lennox, No. 61 at p. 20; NEEA and NPCC, No. 64 at p. 8; California IOUs, No. 67 at p. 6; Rheem, No. 69 at p. 17; ACEEE, NRDC, ASAP, No. 72 at

p. 4) JCI commented that this topic has already be resolved through the CAC/HP ECS Working Group meetings. (CAC TP: JCI, No. 66 at p. 21) Carrier commented to refer to the agreement on external static pressure from the CAC/HP ECS Working Group and expressed the view that this credit is contrary to better aligning the rating procedure with real world data. (CAC TP: Carrier, No. 62 at p. 21) As Carrier and JCI point out, Recommendation #2 of the CAC/HP ECS Working Group Term Sheet also states that the proposed reduction in minimum external static pressure required for units paired with condensing furnaces should not be used. (CAC ECS: CAC/HP ECS Working Group Term Sheet, No. 76 at p. 2)

In light of public comments and the consensus of the CAC/HP ECS Working Group, DOE is not proposing to adopt a reduced minimum external static pressure requirement for air conditioning units tested in blower coil (or single-package) configuration in which a condensing furnace is in the airflow path during the test.

Issue 17: DOE requests comments on not including a reduced minimum external static pressure requirement for blower coil or single-package systems tested with a condensing furnace.

2. Default Fan Power for Rating Coil-Only Units

The default fan power value (hereafter referred to as "the default value") is used to represent fan power input when testing coil-only air conditioners, which do not include their own fans.[16] In the current test procedure, the default value is 365 Watts (W) per 1,000 cubic feet per minute of standard air (scfm) and there is an associated adjustment to measured capacity to account for the fan heat equal to 1,250 British Thermal Units per hour (Btu/h) per 1,000 scfm (10 CFR part 430, subpart B, Appendix M, section 3.3.d). The default value was discussed in the June 2010 NOPR, in which DOE did not propose to revise it due to uncertainty on whether higher default values would better represent field installations. 75 FR 31227 (June 2, 2010). In response to the June 2010 NOPR, Earthjustice commented that the existing default values for coil-only units in the DOE test procedure were not supported by substantial evidence. Earthjustice stated that external static pressures measured from field data showed significantly higher values than DOE's default values in its existing test procedure. (CAC TP: Earthjustice, No. 15 at p. 2) In the November 2015 SNOPR, DOE proposed to update the default value to be more representative of field conditions (*i.e.,* consistent with indoor fan power consumption at the minimum required external static pressures proposed in the November 2015 SNOPR). In the November 2015 SNOPR, DOE used indoor fan electrical power consumption data from product literature, testing, and exchanges with manufacturers collected for the furnace fan rulemaking (79 FR 506, January 3, 2014) to determine an appropriate default value for coil-only products.[17] (80 FR 69318)

DOE calculated the adjusted default fan power to be 441 W/1000 scfm. In the November 2015 SNOPR, DOE proposed to use this value in Appendix M1 of 10 CFR part 430 subpart B where Appendix M included a default fan power of 365 W/1000 scfm. DOE proposed not to make such replacements in Appendix M of 10 CFR part 430 subpart B.

In response to the November 2015 SNOPR, NEEA, NPCC, ACEEE, NRDC, ASAP, and the California IOUs supported raising the coil-only test default fan power to 441 W/1000 scfm to allow for more representative ratings of units. (CAC TP: NEEA and NPCC, No. 64 at p. 8; ACEEE, NRDC, ASAP, No. 72 at p. 4; California IOUs, No. 67 at p. 2) ACEEE, NRDC, and ASAP also commented that they would be happy with 440 W/1000 scfm, as the implied precision of using 441W/1000 scfm is artificial. (CAC TP: ACEEE, NRDC, ASAP, No. 72 at p. 4)

The CAC/HP ECS Working Group also discussed the default value as part of the negotiation process. Ultimately, the Working Group came to a consensus on a recommendation for the default value. Recommendation #3 of the CAC/HP ECS Working Group Term Sheet states that the default fan power for rating the performance of all coil-only systems other than manufactured housing products shall be 441W/1000 scfm. (CAC ECS: ASRAC Working Group Term Sheet, No. 76 at p. 3)

Consistent with the CAC/HP ECS Working Group Term Sheet, DOE maintains its previous proposal to use a default value of 441 W/1000 scfm for split-system air conditioner, coil-only tests. DOE proposes to use this value in appendix M1 of 10 CFR part 430 subpart B in place of the default fan power of 365 W/1000 scfm that has been used previously in Appendix M.

Recommendation #3 of the CAC/HP ECS Working Group Term Sheet also stated that DOE should calculate an alternative default fan power for rating mobile home air conditioner coil-only units based on the minimum external static pressure requirement for blower coil mobile home units (0.30 in. wc.) that it suggested in recommendation #2 of the Term Sheet. (CAC TP: ASRAC Working Group Term Sheet, No. 76 at p. 3) As discussed in section III.C.1, the CAC/HP ECS Working Group included this recommendation because HUD requires less restrictive ductwork for mobile homes than for other types of housing, which reduces electrical energy consumption of the indoor fan. The default value used to rate coil-only mobile home systems should reflect this difference in field energy consumption to improve the field representativeness of the test procedure.

DOE agrees with the CAC/HP ECS Working Group's recommendation to use a different default value for coil-only mobile home systems to reflect the difference in ductwork and, in turn, external static pressure of field installations of these systems. In this SNOPR, DOE used the same aforementioned furnace fan power consumption data and methodology to calculate the appropriate default value for mobile home fan power consumption. However, in this case, DOE evaluated furnace fan power consumption at 0.54 in. wc., which is the 0.30 in. wc. recommended by the CAC/HP ECS Working Group plus 0.24 in. wc. to account for filter and indoor coil pressure drop. The resulting average indoor fan power consumption at the external static pressure representative of mobile home systems is 8% lower than the average indoor fan power consumption at the external static pressure representative of conventional systems. Applying the 8% reduction to the 441W/1000 scfm representing conventional indoor fan power consumption yields 406 W/1000 scfm. Thus, DOE proposes to use 406 W/1000 scfm as the default value for mobile home systems.

DOE notes that it used data from all of the furnaces in its database to calculate this value, instead of only mobile home furnaces, because its database includes a small number of mobile home furnaces that do not represent all capacities or motor technologies. DOE recognizes that including non-mobile home furnaces in this analysis may bias the result. Due to the space constraints typical of mobile home system installations, mobile home indoor units generally have more restrictive cabinets compared to conventional indoor units, which would be expected to increase the static pressure experienced by the indoor fan and, in turn, increase indoor fan power consumption. Consequently, DOE expects that a default value calculated based on mobile home indoor fan performance data may result in a higher default value for these systems than the value proposed. In addition to the new default power values, DOE proposes to adjust measured capacity to account for the fan heat consistent with 441W/1000 scfm and 406 W/1000 scfm: 1,505 and 1,385 Btu/h per 1,000 scfm.

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[16] See 10 CFR part 430, subpart B, appendix M, section 3.3.d.

[17] For a complete explanation of DOE's methodology, see 80 FR 69278, 69319–20 (Nov. 9, 2015).

Issue 18: DOE requests comment on the proposed default fan power value for coil-only mobile home systems. DOE also requests mobile home indoor fan performance data for units of all capacities and that use all available motor technologies in order to allow confirmation that the proposed default value is a good representation for mobile home units.

The DOE test procedure needs a definition for a mobile home coil-only unit to appropriately apply the proposed default value for these kinds of CAC/HP. DOE proposes to define mobile home coil-only unit as:

- *Mobile home coil-only system* means a coil-only split system that includes an outdoor unit and coil-only indoor unit and coil-only indoor unit that meet the following criteria: (1) The outdoor unit is shipped with manufacturer-supplied installation instructions that specify installation only for mobile homes that comply with HUD Manufactured Home Construction Safety Standard 24 CFR part 3280, (2) the coil-only indoor unit is shipped with manufacturer-supplied installation instructions that specify installation only in a mobile home furnace, modular blower, or designated air mover that complies with HUD Manufactured Home Construction Safety Standard 24 CFR part 3280, and (3) the coil-only indoor unit and outdoor unit each has a label in at least ¼ inch font that reads "For installation only in HUD manufactured home per Construction Safety Standard 24 CFR part 3280."

Issue 19: DOE requests comments on its proposed definition for mobile home coil-only unit.

3. Revised Heating Load Line Equation

a. General Description of Heating Season Performance Factor (HSPF)

In the current test procedure, the HSPF determined for heat pumps in heating mode is calculated by evaluating the energy usage of both the heat pump unit (reverse refrigeration cycle) and the resistive heat component when matching the house heating load for the range of outdoor temperatures representing the heating season. The temperature range is split into 5-degree "bins", and an average temperature and total number of hours are assigned to each bin, based on weather data used to represent the heating season for each climate region. An HSPF value can be calculated for each climate region, but the HSPF rating is based on Region IV. In the HSPF calculation, the amount of heating delivered is set equal to the heating load, which increases as the bin temperature decreases. In the current test procedure, the heating load is proportional to the difference between 65 °F and the outdoor (bin) temperature. The heating load also is dependent on the size of the house that the unit heats. For the HSPF calculation the size of the house is set based on the capacity of the heat pump. For the current test procedure, the heating load is proportional to the heating capacity of the heat pump when operating at 47 °F outdoor temperature. The resulting relationship between heating load and outdoor temperature is called the heating load line equation—it slopes downward from low temperatures, dropping to zero at 65 °F. The slope of the heating load line equation affects HSPF both by dictating the heat pump capacity level used by two stage or variable speed heat pumps at a given outdoor temperature, and also by changing the amount of auxiliary electric resistance heat required when the unit's heat pumping capacity is lower than the heating load. The current test procedure defines two heating load levels, called the minimum heating load line and maximum heating load line. However, it is the minimum heating load line in Region IV that is used to determine HSPF for rating purposes.[18]

b. HSPF Issues

Studies have indicated that the current HSPF test and calculation procedure overestimates ratings because the current minimum heating load line equation is too low compared to real world situations.[19] In response to the November 2014 ECS RFI, NEEA and NPCC commented that the federal test procedure does a poor job representing balance point temperatures and electric heat energy use in the case of heat pump systems. They pointed out the inability of the test procedure to capture dynamic response to heating needs, such as the use of electric resistance (strip) heat during morning or afternoon temperature setup (*i.e.*, rewarming of the space after a thermostat setback period). They also expressed concerns about capturing the use of electric resistance heat during defrost cycles and at times when it shouldn't be needed, such as when outdoor temperatures are above 30 °F. (CAC ECS: NEEA & NPCC, No. 19 at p. 2)

DOE agreed with the NEEA and NPCC regarding balance point in the November 2015 SNOPR and noted that the heating balance point determined for a typical heat pump using the current minimum heating load line equation in Region IV is near 17 °F, while the typical balance point is in the range 26 to 32 °F, resulting from installing a proper-sized unit based on the design cooling load according to ACCA Manual S, 2014.[20] The low heating balance point means that the test procedure calculation adds in much less auxiliary heat than would actually be needed in cooler temperatures, thus inflating the calculated HSPF. Furthermore, the zero load point of 65 °F ambient, which is higher than the typical 50–60 °F zero load point,[21] causes the test procedure calculation to include more hours of operation at warmer outdoor temperatures, for which heat pump operation requires less energy input, again inflating the calculated HSPF. These effects result in overestimation of rated HSPF up to 30% compared to field performance, according to a paper by the Florida Solar Energy Center (FSEC).[22] For these reasons, DOE reviewed the choice of heating load line equation for HSPF ratings and proposed to modify it in the November 2015 SNOPR. 80 FR at 69320–2 (Nov. 9, 2015).

As part of its review for the November 2015 SNOPR, DOE considered a 2015

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[18] See 10 CFR part 430, subpart B, appendix M, Section 1. Definitions.

[19] Erbs, D.G., C.E. Bullock, and R.J. Voorhis, 1986. "New Testing and Rating Procedures for Seasonal Performance of Heat Pumps with Variable speed Compressors", ASHRAE Transactions, Volume 92, Part 2B.

Francisco, Paul W., Larry Palmiter, and David Baylon, 2004. "Understanding Heating Seasonal Performance Factors for Heat Pumps", 2004 Proceedings of the ACEEE Summer Study on Energy Efficiency in Buildings.

Fairey, Philip, Danny S. Parker, Bruce Wilcox, and Matthew Lombardi, 2004. "Climatic Impacts on Seasonal Heating Performance Factor (HSPF) and Seasonal Energy Efficiency Ratio (SEER) for Air-Source Heat Pumps", ASHRAE Transactions, Volume 110, Part 2.

[20] *Manual S: Residential Equipment Selection* (2nd ed., Ver. 1.00). (2014). Arlington, VA: Air Conditioning Contractors of America (ACCA). pp. N7–N1.

[21] Francisco, Paul W., Larry Palmiter, and David Baylon, 2004. "Understanding Heating Seasonal Performance Factors for Heat Pumps", 2004 Proceedings of the ACEEE Summer Study on Energy Efficiency in Buildings.

[22] Fairey, Philip, Danny S. Parker, Bruce Wilcox, and Matthew Lombardi, 2004. "Climatic Impacts on Seasonal Heating Performance Factor (HSPF) and Seasonal Energy Efficiency Ratio (SEER) for Air-Source Heat Pumps", ASHRAE Transactions, Volume 110, Part 2.

Oak Ridge National Laboratory (ORNL) study[23] that examined the heating load line equation for cities representing the six climate regions of the HSPF test procedure in Appendix M. The study developed modified regional heating load line equations, including a heating load line equation for Region IV for calculation of a unit's HSPF. ORNL conducted building load analyses using the EnergyPlus simulation tool (see energyplus.net) using single-family Prototype Residential House models based on building characteristics specified by the 2006 International Energy Conservation Code (2006 IECC). The study concluded that a heating load line equation closer to the maximum load line equation of the current test procedure and with a lower zero-load ambient temperature would better represent field operation than the minimum load line equation presently used for HSPF rating values.

c. November 2015 SNOPR Heating Load Line Equation Proposal

In the November 2015 SNOPR, DOE proposed a new heating load line equation based on the findings of the ORNL study:

$$BL(T_j) = \frac{(T_{zl}-T_j)}{T_{zl}-T_{OD}} \cdot C \cdot \dot{Q}_c(95^{\circ}F) \text{ where,}$$

T_j = the outdoor bin temperature, °F
T_{zl} = the zero-load temperature, °F
T_{OD} = the outdoor design temperature, °F, which varies by climate region
C = the slope (adjustment) factor
$\dot{Q}_c(95\ ^{\circ}F)$ = the nominal cooling capacity at 95 °F, Btu/h

The proposed equation included the following changes from the current heating load line equation used for the HSPF calculation:[24]

- A zero-load temperature that varies by climate region, as shown in Table III.6, and is 55 °F for Region IV;
- The building load is proportional to the nominal cooling capacity at 95 °F, $\dot{Q}_c(95\ ^{\circ}F)$, as opposed to the heating capacity at 47 °F (except for heating-only heat pumps), to reflect typical selection of cooling/heating heat pumps based on cooling capacity; and
- The slope (adjustment) factor, C, is 1.3 rather than 0.77;

The November 2015 SNOPR also proposed revised heating load hours for each climate region, as shown in Table III.6. These hours are less than the current heating load hours by the number of hours in the temperature bins between the current and proposed zero-load temperatures.

TABLE III.6—CLIMATE REGION INFORMATION PROPOSED IN THE NOVEMBER 2015 SNOPR

Region No.	I	II	III	IV	V	VI
Heating Load Hours, HLH	562	909	1,363	1,701	2,202	* 1,974
Zero-Load Temperature, T_{zl}	60	58	57	55	55	58

* Pacific Coast Region.

The ORNL study developed heating load line equations consistent with the similar equations of the current test procedure, using the EnergyPlus heating and cooling loads calculated for the IECC 2006 building models developed for numerous cities of the climate regions of interest. The approach sized the house based on the heat pump cooling capacity rather than heating capacity, consistent with the sizing approach prescribed for heat pumps in ACCA Manual S, which is also based on cooling capacity. The study used the heat pump size recommendations based on the design cooling load calculated by EnergyPlus in its analysis. The design cooling load was determined for the 0.4% cooling design day dry-bulb temperature based on a 24-hour design day calculation using the heat balance method, which includes the effects of house thermal mass on the peak load. For Climate Region IV, used as the basis for the HSPF calculation, the study concluded that the appropriate slope factor (C in the equation defined above) is 1.3.

In the November 2015 SNOPR, DOE also proposed to eliminate maximum and minimum heating load line equations in an effort to focus on one load level that would best represent heating. As mentioned, the proposed heating load line equation is based on nominal cooling capacity rather than nominal heating capacity, which is intended to better reflect field installation practices than the basis on heating capacity of the current test procedure. This approach also justifiably benefits units with higher heating to cooling capacity ratios. Such units would have improved HSPF ratings, reflecting the shift of more heat from electric resistance to heat pumping. For the special case of heating-only heat pumps, DOE proposed to maintain a sizing approach based on heating capacity.

The ORNL study also evaluated the impact of the proposal on HSPF ratings. Based on the results, DOE estimated that HSPF would be reduced on average about 16 percent for single speed and two-stage heat pumps. Consistent with the requirements of 42 U.S.C. 6293(e), DOE will account for these changes in any proposed energy conservation standard, and this test procedure proposal would not be required as the basis for efficiency representations until the compliance date of any new energy conservation standard.

d. Comments on the November 2015 SNOPR

Comments expressed by stakeholders on the proposed heating load line equation, both in written form in response to the November 2015 SNOPR and verbally during the CAC/HP ECS Working Group meetings, are summarized in the following paragraphs, organized by common themes.

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[23] ORNL, Rice, C. Keith, Bo Shen, and Som S. Shrestha, 2015. *An Analysis of Representative Heating Load Lines for Residential HSPF Ratings*, ORNL/TM–2015/281, July. (Docket No. EERE–2009–BT–TP–0004–0046).

[24] In the current test procedure, for all climate regions but Region V, the heating load based on minimum design heating requirement as a function of outdoor temperature T_j is $Q_h(47) * 0.77 * (65 - Tj)/60$.

Field Representativeness of the Heating Load Line Equation

One common theme raised in the comments concerned the field representativeness of the data used to generate the proposed heating load line equation. Unico expressed concern regarding the data collected, requesting more time dedicated to research, particularly on the northward shift of heat pump use despite the majority still being sold in temperate climates. (CAC TP: Unico, No. 63 at p. 13) Lennox expressed concern that the building stock used to evaluate the change was outdated; the current load line should be aligned with the time period of the standard. (CAC TP: Lennox, No. 61 at p. 20) During the ASRAC meetings, Ingersoll-Rand expressed the same concern, adding that the housing stock would continue to improve over time, driving the slope down. (CAC ECS: ASRAC Public Meeting, No. 87 at p. 7) Ingersoll-Rand also expressed reservations that the ORNL report relied on data generated through simulations. (CAC ECS: ASRAC Public Meeting, No. 85 at p. 134).

Southern Company commented that basing the heating load line equation exclusively on the 2006 IECC standard unrealistically assumes flawless adoption and enforcement of building code standards and that even future housing stock would be much less tight (*i.e.,* would allow much more infiltration of outdoor air than allowed by the IECC 2006 building code). (CAC ECS: ASRAC Public Meeting, No. 85 at p. 130) ACEEE requested that simulation data generated in the ORNL report remain in the discussion as the report represents a substantial contribution. (CAC ECS: ASRAC Public Meeting, No. 85 at p. 134).

DOE understands the importance of developing the heating load line equation with data that accurately represents field conditions and operation. Regarding the relevancy of the 2006 IECC code, DOE maintains that it is an appropriate representation of the housing stock in 2021 for the purposes of developing the heating load line equation. A follow-up investigation by Lawrence Berkeley National Laboratory (LBNL) examining RECS data corroborated this claim, showing that vintage housing characteristics in 2021 would at best resemble new housing characteristics in 2005. (CAC ECS: ASRAC Public Meeting, No. 85 at p. 81) DOE also maintains that EnergyPlus simulation results provide the most accurate available picture of heating load requirements and their dependence on independent parameters, (*e.g.,* house design details, heat pump sizing, typical weather patterns). While the data from some direct field studies have been made available, none have included information on heat pump sizing, a vital parameter for fitting a heating load line curve to the data.

Impact on Model Differentiation

Another common theme expressed in the comments concerned the impact of the proposed heating load line equation on model differentiation. Mitsubishi suggested that the proposed changes would decrease performance differentiation between single stage, two stage, and variable speed systems and recommended DOE refrain from making any HSPF changes. (CAC TP: Mitsubishi, No. 68 at p. 5) Rheem, JCI, and Carrier/UTC concurred. (CAC TP: Rheem, No. 69 at p. 17; JCI, No. 66 at p. 13; Carrier/UTC, No. 62 at p. 21) ACEEE added that, in the short-term, accurately capturing relative performance of products should take precedence over better reflecting field energy use if the two are mutually exclusive. (CAC TP: ACEEE, No. 72 at p. 5) During the 2015–2016 CAC/HP ECS Working Group meetings, AHRI expressed concern over the lack of differentiation for variable speed products resulting from the proposed heating load line equation. (CAC ECS: ASRAC Public Meeting, No. 88 at p. 83) AHRI suggested a load line having a lower slope factor (equal to 1.02) and presented an initial assessment of the impact of both the DOE and AHRI proposals on product differentiation. Additionally, Southern Company stressed the importance of encouraging variable speed operation. (CAC ECS: ASRAC Public Meeting, No. 88 at p. 87).

To allow more detailed examination of this question, AHRI provided test data to DOE's contractor under a non-disclosure agreement. The data included performance measurements required to calculate HSPF using the current and the proposed test procedures, for a number of two stage and variable speed heat pumps. The calculations showed that the proposed heating load line equation (1.3 slope factor and 55 °F zero-load temperature, with sizing based on the nominal cooling capacity) would reduce the average HSPF difference between two stage and variable speed models as compared to the current heating load line equation (0.77 slope factor and 65 °F zero-load temperature, with sizing based on the nominal heating capacity) from 1 HSPF point currently to roughly 0.35. DOE presented the methodology, findings, conclusions, and implications of the analysis during the CAC/HP ECS Working Group meetings. (CAC ECS: ASRAC Public Meeting, No. 63 at pp. 1–7).

DOE acknowledges the impact on differentiation of variable speed heat pumps when calculating HSPF with a higher-slope factor heating load line equation. However, EPCA requires test procedures to be representative of the covered product's average use cycle—not that the test procedure should favor particular design options. (42 U.S.C. 6292(b)(3)) DOE evaluated the proposed amendment with a focus on accurately capturing field performance and believes that the performance of models that clearly perform better in the field will be captured and reflected in higher ratings when tested using a field-representative efficiency metric. Nevertheless, DOE agrees that all variable speed CAC/HP designs should be considered carefully in the analysis to assure that the resulting test procedure fairly represents their performance. As described below, ORNL has made some revisions in its analysis that DOE has incorporated into a revised proposal that improves the differentiation of variable speed heat pumps.

General Impact on Current HSPF Ratings

Comments on the overall impact of the proposed heating load line equation on current HSPF ratings were also received. Carrier/UTC reported a dramatic impact on all types of equipment, with reductions in HSPF ranging from 15 to 25 percent as a result of the proposed change in the November 2015 SNOPR. (CAC TP: Carrier/UTC, No. 62 at p. 21). Rheem commented that the proposal would reduce the HSPF of heat pumps designed for southern market installations but did not clarify why southern market heat pumps would be more affected. (CAC TP: Rheem, No. 69 at p. 17).

DOE notes that, as indicated in the ORNL report, field studies have shown that HSPF ratings based on the current test procedure may be higher than actual performance. Hence, a reduction in the rating with the revised test procedure would be consistent with observations of actual heat pump field performance.

Sizing Based on Cooling Capacity

Other comments addressed DOE's proposal in the November 2015 SNOPR to base the heating load line equation on cooling capacity rather than heating capacity. NEEA and NPCC recommended that each heat pump be assigned one of several heating load line equations based on heating capacity and balance point temperature. The appropriate heating load line equation would be the one where the load at 30 °F is most nearly equal to the heat pump capacity at that temperature. (CAC TP: NEEA and NPCC, No. 64 at p. 11) However, ACEEE expressed support for the cooling capacity basis during the ASRAC meetings. (CAC ECS: ASRAC Public Meeting, No. 88 at p. 92).

DOE understands that the balance point temperature for heat pumps operating in the field is closer to 30 °F than the 17 °F calculated for the current heating load line equation. For the heating load line equation proposed in the November 2015 SNOPR, the average balance point temperature is between 27 and 28 °F. However, DOE does not agree with NEEA and NPCC that heat pumps are typically sized in the field based on heating capacity or the balance point temperature. The sizing instructions outlined in ACCA Manual S specifically state that "heat pump equipment shall not be sized for the design day heating load, or for an arbitrary thermal balance point." DOE further understands that most heat pump units in the field are sized based on cooling capacity as opposed to heat pump capacity, which is consistent with the Manual S provision that "heat pumps shall be sized for cooling." [20] To ensure field representativeness, DOE proposes to maintain the approach that assumes heat pumps are sized based on cooling capacity. This approach also benefits heat pump units that have higher nominal heating to cooling capacity ratios by boosting their HSPF.

Overall Regulatory Approach

Other comments concerned the regulatory approach regarding the heating load line equation. Carrier/UTC encouraged DOE to go beyond adjusting the heating load line equation, suggesting that the current HSPF procedure does not adequately account for the benefits of variable speed designs and that DOE should fund research into a completely new procedure rather than applying corrections to the existing procedure by changing the slope (CAC TP: Carrier/UTC, No. 62 at p. 21). Unico suggested tabling the change until the next [CAC test procedure] rulemaking when and if there would be support for changing it (CAC TP: Unico, No. 63 at p. 13). JCI added that changing the temperature at which the heating cyclic test is performed would be acceptable for Appendix M1 but not for Appendix M. (CAC TP: JCI, No. 66 at p. 21).

ACEEE, NRDC, and ASAP proposed that AHRI, ASHRAE, DOE, and all other stakeholders begin work now on a new "clean-sheet" rating method for heat pumps, to be effective in the next rule after this current rulemaking, as was recently done for water heaters. ACEEE, NRDC, and ASAP stated that the current heat pump test method is obsolete. It was developed when essentially all air-source heat pumps were single-stage, and it appears that the present method is not technology-neutral. According to ACEEE, NRDC, and ASAP, the current test method should be revised to avoid penalizing advanced technologies with the potential for higher efficiency, lower heating bills, and reduced impact on winter grid peaks. ACEEE, NRDC, and ASAP recommended that the test procedure for variable speed heat pumps be revised in a future rulemaking to better reflect both the relative performance and field energy use of this equipment. (CAC TP: ACEEE, NRDC, and ASAP, No. 72 at p. 5–6).

CAC/HP ECS Working Group members ultimately did not agree on a resolution on the current heating load line equation regulatory approach and agreed (as reflected in the Final Term Sheet Recommendation #4) that DOE should make a final decision based on a review of available information. (CAC ECS: ASRAC Term Sheet, No. 76 at p. 3).

DOE acknowledges that another test method could be developed rather than the current heating load line equation approach, but DOE does not wish to propose a sweeping overhaul with this notice. DOE has taken the steps agreed to in the ASRAC Final Term Sheet: To evaluate past comments, improve the current analysis, and recommend an improved heating load line equation based on a modest departure from the existing approach. These steps taken leading up to the proposal in this notice do not preclude DOE from evaluating more fundamental changes in future rulemakings. DOE will continue to evaluate test methodologies and will work with AHRI and other interested parties to evaluate other approaches for testing heat pumps, determining the suitability of a more fundamental change in a future rulemaking.

In response to JCI's comment regarding changes to the cyclic test, DOE proposed in the November 2015 SNOPR to change the cyclic test temperature for variable speed heat pumps only in Appendix M1 of 10 CFR part 430 subpart B, and not to Appendix M of the same Part and Subpart—DOE has not changed this aspect of the proposal in this notice.

Heating Load Line Equation Slope Factor and Zero-Load Temperature

DOE also received specific recommendations on the heating load line equation slope factor and zero-load temperature. In its comments, Lennox opposed the heating load line equation slope factor change from 0.77 to 1.3 and recommended 1.02, citing better field representativeness and wider product differentiation. (CAC TP: Lennox, No. 61 at p. 12) During the ASRAC meetings, AHRI concurred, indicating that (a) differentiation of variable speed products from two stage or single stage products is better with the 1.02 slope factor, and (b) the 2012 IECC building requirements (for which the ORNL study showed a 1.02 slope) would better represent building stock in 2021 than the 2006 IECC requirements. (CAC ECS: ASRAC Public Meeting, No. 88 at p. 83).

Regarding the heating load line equation zero-load temperature, the California IOUs deferred to the CAC/HP ECS Working Group consensus, generally accepting the 55 °F zero-load temperature proposed in the November 2015 SNOPR. (CAC TP: CA IOUs, No. 67 at p.7) JCI suggested retaining the 65 °F intercept and 0.7 slope factor of the current test procedure. JCI argued for the 65 °F intercept, referring to evidence shared during the ASRAC meetings by Ingersoll-Rand, which JCI indicated shows that heat pump operation does occur at these mild conditions. JCI cited the negative impact on variable speed product differentiation in supporting the lower slope factor. (CAC TP: JCI, No. 66 at p. 13).

In response to JCI's concerns outlined in this preamble, model differentiation is not an EPCA requirement for test procedures.

Additional 35 °F Test for Variable-Speed Heat Pumps

In the November 2015 SNOPR, DOE requested comment regarding the appropriate approach for rating of variable-speed heat pumps if DOE were not to adopt the proposed general heating load line equation. More specifically, DOE was concerned about a potential inaccuracy associated with the use of extrapolation of the minimum-speed performance measured in 47 °F and 62 °F ambient temperatures for characterization of heat pump performance below 47 °F. In the November 2015 SNOPR, DOE described two options. In Option 1, DOE would base performance on minimum speed tests at 47 °F and intermediate speed tests at 35 °F, an approach which would involve no additional test burden. In Option 2, DOE would require an additional minimum speed test at 35 °F, which would likely be more accurate, at the cost of a higher test burden.

In its comments, UTC/Carrier supported Option 1, because it would not result in an increase in testing burden. (CAC TP: UTC/Carrier, No. 62 at p. 22) The California IOUs supported Option 2, and argued that the additional test burden would be justified by the accuracy improvements. (CAC TP: CA IOUs, No. 67 at p. 7) Johnson Controls asked for more time to study both options, requesting that the discussion be incorporated as part of the 2015–2016 ASRAC Negotiations. (CAC TP: JCI, No. 66 at p. 22).

DOE has responded to the comments received and addressed this issue in the context of the revised heating load line equation proposed in section III.C.3.i of this notice.

e. Modifications to the 2015 ORNL Analysis

Following the conclusion of the CAC/HP ECS Working Group meetings, ORNL reexamined key assumptions adopted in its 2015 report[23] and determined that three modifications would be beneficial in order to improve the field representativeness of the analysis. The analysis revisions and its results are described in an addendum to the 2015 report. (CAC TP: ORNL Report Addendum, No. 2) Ultimately the modifications to the analysis led DOE to propose lower heating load line equation slope factors (as discussed later in this section), which addresses the comments of several stakeholders.

First, ORNL removed continuous mechanical ventilation as a feature of the Prototype Residential Houses used in the analysis. While housing models used in the initial analysis included continuous mechanical ventilation, the 2006 IECC does not include that requirement, and DOE believes that a prototype design without continuous mechanical ventilation would be more representative of the average housing stock.

ORNL also modified the heat pump sizing approach used by the analysis. In the 2015 study, the auto-sizing feature of EnergyPlus was used. The auto-sizing feature uses a heat pump sized for the 0.4% cooling design dry-bulb temperature, based on a 24-hour design day calculation using the heat balance method, which includes the effects of house thermal mass on the peak load. However, this approach does not provide cooling capacity sufficient to meet the load for all hours of the year. For the revised analysis, ORNL increased the heat pump size so that cooling capacity would match or exceed the cooling load for all hours of the year. This increases heat pumps capacities from 6% to 12%, depending on the cities evaluated. This approach also better aligns the sizing approach of the analysis with the sizing assumptions used in the DOE test procedure, meaning that the heat pump's cooling capacity is very close to 1.1 times the cooling load for 95 °F ambient temperature, consistent with equation 4.1–2 of the current test procedure. ORNL also applied an additional 10% oversizing to heat pumps for Region V, based on the observation that this adjustment is required to achieve consistency with the 1.1 factor oversizing for cooling used in the DOE test procedure.

The changes in heating load and heat pumps sizing led to reduction in all of the regional heating load line equation slope factors. Removing continuous ventilation reduced both the zero-load temperatures and the heating load line equation slope factor across each region. This change reduced the heating load line equation slope factor an average (across all regions) of 5% while the zero-load temperatures dropped on average by about 1–2 °F. The adjustment in heat pump size led to an average additional reduction in the slope factor of roughly 9%, but did not change the zero-load temperatures. The calculated heating load line equation slope factors of the modified analysis vary sufficiently that DOE is proposing regional heating load line equation slope factors as opposed to a single slope factor, using Region IV as the basis for the HSPF rating. (CAC TP: ORNL Report Addendum, No. 2)

f. DOE Proposal Based on Revised Analysis

Based on ORNL's revised findings, DOE has revised its heating load line equation proposal from the November 2015 SNOPR. DOE introduced a final adjustment to the slope factors developed by ORNL to address variable speed systems. This aligns the analysis more closely with the range of capacity recommended in ACCA Manual S, which allows significantly more oversizing for variable-speed heat pumps than for single speed or two-stage heat pumps. The range of recommended capacity factor is 0.9 to 1.15 for single-stage heat pumps and 0.9 to 1.30 for variable-speed. DOE recognizes that such oversizing is much more tolerable with variable-speed heat pumps as compared to single-speed heat pumps, due to their ability to better match mild-weather loads in both heating and cooling seasons, and thus limit the inefficiencies associated with cycling losses. Based on the averages of these ranges, DOE calculated a size adjustment factor for variable-speed units equal to (0.9 + 1.30) divided by (0.9 + 1.15), which equals 1.07, essentially suggesting an additional 7 percent oversizing for variable-speed heat pumps. Applying this to the heating load line equation analysis leads to a corresponding reduction in the slope factors for variable-speed products. DOE notes that for consistency, this oversizing would be applied in seasonal performance calculations for cooling mode and for heating mode.

With the analysis changes and the adjustment for variable-speed models, DOE is proposing the following heating load line equation changes from the November 2015 SNOPR:

- The zero-load temperature would vary by climate region according to the values provided in Table III.10, but remain at 55 °F for Region IV;
- The heating load line equation slope factor for single- and two-stage heat pumps would vary by climate region, as shown in Table III.7, and be 1.15 for Region IV; and
- For variable speed heat pumps, the heating load line equation slope factor would be 7 percent less than for single- and two-stage heat pumps. It would vary by climate region, as shown in Table III.7, and be 1.07 for Region IV;

DOE also revised the heating load hours based on the new zero load temperatures of each climate region. The revised heating load hours are also given in Table III.10.

TABLE III.7—CLIMATE REGION INFORMATION PROPOSED IN THIS NOTICE

Region No.	I	II	III	IV	V	VI*
Heating Load Hours	493	857	1280	1701	2202	1842
Zero-Load Temperature, T_{zl}	58	57	56	55	55	57
Heating Load Line Equation Slope Factor, C	1.10	1.06	1.29	1.15	1.16	1.11

TABLE III.7—CLIMATE REGION INFORMATION PROPOSED IN THIS NOTICE—Continued

Region No.	I	II	III	IV	V	VI *
Variable Speed Slope Factor, C_{VS}	1.03	0.99	1.20	1.07	1.08	1.03

* Pacific Coast Region.

Following from this proposed heating load line equation change, DOE also proposes in this SNOPR to require cyclic testing for variable speed heat pumps be run at 47 °F, rather than using the 62 °F ambient temperature that is required by the current test procedure (see Appendix M, section 3.6.4 Table 11). The test would still be conducted using minimum compressor speed. The modified heating load line cyclic test at 47 °F would be more representative of the conditions for which cycling operation is considered in the HSPF calculation.

In addition, for variable-speed heat pumps, the SEER would be calculated using a building load that is adjusted downwards by 7 percent, consistent with the heating load adjustment.

Issue 20: DOE requests comments on the adjustments to the proposals for calculating HSPF for heat pumps and SEER for variable-speed heat pumps.

g. Impact of DOE Proposal on Current HSPF Ratings and Model Differentiation

DOE examined the impact of the present proposal on HSPF ratings based on test results for 2, 3, and 5-ton heat pumps provided by AHRI. Table III.8 presents the effect of different Region IV heating load line equation slope factors on the average HSPF of two-stage and variable speed units using these results. For two-stage units, the average HSPF reduction from measurements using the current test procedure to the current proposal would be 13.9%. For variable speed products, the average reduction resulting from the current proposal would be 15.3%. The purpose of the test procedure is to evaluate the performance during a representative average use cycle. Nevertheless, DOE believes that reasonable differentiation is still preserved with the current proposal in this SNOPR. Further, DOE believes that heat pumps with good heating mode performance will continue to stand out as compared to heat pumps without good heating mode performance. The test procedure changes proposed in this notice to allow higher speed operation at lower temperature and for a 5 °F optional test (see section III.C.4) should allow for even greater differentiation for variable-speed heat pumps with good heating performance.

TABLE III.8—EFFECT OF REGION IV SLOPE FACTORS ON HSPF OF TWO-STAGE (TS) AND VARIABLE SPEED (VS) MODELS

	Region IV slope factors				
	2010 Final rule *	1.02	1.15	1.30	2016 SNOPR **
Avg. TS HSPF	9.49	8.47	8.17	7.80	8.17
Avg. VS HSPF	10.93	9.44	8.95	8.44	9.26
Avg. HSPF Differential	1.44	0.97	0.79	0.64	1.09

* Slope factor for all equipment: 0.77.
** Slope factor for two-stage equipment: 1.15. Slope factor for variable speed equipment: 1.07.

h. Translation of CAC/HP ECS Working Group Recommended HSPF Levels Using Proposed Heating Load Line Equation Changes

Recommendation #9 of the CAC/HP ECS Working Group Term Sheet included two sets of recommended national HSPF standard levels. The Working Group based these levels on heating load line equation slope factors of 1.02 and 1.30 to reflect the two factors primarily discussed during the negotiations. The Working Group designated these levels as "HSPF2" to indicate that they are not equivalent to current HSPF ratings. Table III.9 includes the Working Group's recommended HSPF levels:

TABLE III.9—CAC/HP ECS WORKING GROUP RECOMMENDED HSPF LEVELS BASED ON PREVIOUSLY PROPOSED HEATING LOAD LINE EQUATIONS

Product class	HSPF2–1.02	HSPF2–1.30
Split-System Heat Pumps	7.8	7.1
Single-Package Heat Pumps	7.1	6.5

As mentioned, the Working Group ultimately left the decision of the appropriate heating load line equation factor up to DOE. The HSPF levels recommended by the Working Group are based on different heating load line equation factors than DOE is proposing in this SNOPR. Consequently, DOE determined HSPF levels that are consistent with those recommended by the Working Group but based on the 1.15 heating load line equation factor DOE proposes in this notice. DOE does not have access to all of the data or details of the methodology used by the Working Group to derive the HSPF levels it recommended. In the absence of this information, DOE used linear interpolation between the HSPF values recommended by the Working Group using 1.02 and 1.30 to derive the associated HSPF values using a heating load line equation factor of 1.15. DOE confirmed that linear interpolation provides good match to directly calculated results using available heat pump performance data. Specifically, the maximum deviation for an interpolated value is 0.04 HSPF points for a representative sample of heat pumps, and the average deviation is 0.005 HSPF points. Table III.10 includes the HSPF levels that are consistent with the Working Group recommended HSPF levels, but based on a 1.15 heating load line equation slope factor.

TABLE III.10—CAC/HP ECS WORKING GROUP RECOMMENDED HSPF LEVELS BASED ON CURRENTLY PROPOSED HEATING LOAD LINE EQUATION

Product class	HSPF
Split-System Heat Pumps	7.5
Single-Package Heat Pumps	6.8

Issue 21: DOE requests comments on the adjusted values of minimum HSPF based on the HSPF efficiency levels recommended by the CAC/HP ECS Working Group.

i. Consideration of Inaccuracies Associated With Minimum-Speed Extrapolation for Variable-Speed Heat Pumps

DOE discussed in the November 2015 SNOPR potential inaccuracy associated with the use of test data conducted at minimum speed in 47 °F and 62 °F ambient temperature to estimate heat pump performance below 47 °F. 80 FR at 69322–3 (Nov. 9, 2015). Specifically, for heat pumps that increase compressor speed as ambient temperature drops below 47 °F, the extrapolation of performance based on the 47 °F and 62 °F minimum-speed tests over-estimates efficiency. Because the bins in this temperature range have many hours associated with them, the impact on HSPF of this inaccuracy can be significant, particularly with the current test procedure, which uses a 0.77 heating load line equation slope factor. However, for the 1.3 slope factor proposed in the November 2015 SNOPR, DOE found that the impact on HSPF for the available heat pump data was too small to justify modifying the test procedure. The higher slope factor reduces the impact of the issue because the higher heating load reduces the weighting of the HSPF on minimum-speed performance. DOE indicated that, because the higher slope factor alleviated the minimum-speed inaccuracy, it did not propose any test procedure amendment to address this issue, but that it might reconsider this possibility if a lower heating load line equation slope factor were adopted. Id.

DOE proposed two potential approaches to resolve this minimum-speed issue. The first would have involved approximation of minimum-speed performance between 35 °F and 47 °F based on the intermediate-speed frosting-operation test at 35 °F and the minimum-speed test at 47 °F, and assuming that below 35 °F the nominal minimum speed is the same as the intermediate speed. This first approach would not have required any additional testing. The second approach discussed for resolving the issue was to require two additional tests, one intermediate-speed test at 17 °F and one minimum-speed frosting-operation test at 35 °F. DOE requested comment on which of these approaches would be preferable. 80 FR at 69323 (Nov. 9, 2015). A summary of the comments received is located in section III.C.3.d.

As discussed in this preamble, DOE is proposing in this SNOPR to reduce the heating load line equation slope factor to 1.07 for variable-speed heat pumps. At this level, the data currently available to DOE suggests that the HSPF may be overestimated by as much as 16 percent as a result of the inaccuracy associated with the minimum-speed extrapolation. Hence, DOE is also proposing revision to the estimation of minimum-speed performance to reduce the impact of the error. Consistent with stakeholder comments, DOE is proposing to adopt the approach discussed in the November 2015 SNOPR that does not require additional testing. Further, DOE proposes that the approach be used only for heat pumps that vary the minimum speed when operating in outdoor temperatures that are in a range for which the minimum-speed performance factors into the HSPF calculation. For example, if the rotational compressor operating speed for a heat pump operating at its minimum speed remains constant down to 37 °F and the HSPF calculation considers minimum-speed operation only down to the 37 °F temperature bin (this would occur if the calculated heating load is equal to or greater than the intermediate-speed capacity for temperature bins below 37 °F), any rotational speed increase below 37 °F would not require use of the alternative calculation. DOE proposes adoption of a definition, "minimum-speed-limiting variable-speed heat pump," to refer to such heat pumps.

For the variable-speed heat pumps for which DOE's contractor received data from AHRI during the 2015–2016 ASRAC Negotiations, use of this approach would reduce average HSPF from 9.26 to 9.13, reducing the VS/TS differential to 0.96, which is equivalent to the differential for a 1.02 slope factor without considering any different treatment of variable-speed heat pumps (see Table III–11). However, it is not clear that all the heat pumps of the AHRI dataset would have required use of the alternative calculation approach, so the actual reduction in the average HSPF could be less.

DOE notes that it described another option for reducing the minimum-speed inaccuracy in the November 2015 SNOPR, specifically requiring additional tests to more thoroughly explore the heat pump's performance for the range of different operating speeds and ambient conditions. DOE could consider additional tests to improve accuracy further. Potential additional tests would include an intermediate-speed test at 17 °F, and either minimum-speed frosting-condition tests near 35 °F or minimum-speed steady-state tests at 40 °F or above. The HSPF calculation could be adjusted to provide better estimates of variable-speed heat pump performance over the range of conditions considered in the calculation based on one or more of these tests.

DOE also proposes that certification reports indicate as part of non-public data whether the alternative calculation method was used to determine the heat pump's rating.

Issue 22: DOE requests comment on its proposal to require use of an alternative HSPF rating approach (for heat pumps that raise minimum compressor speed in ambient temperatures that impact the HSPF calculation) that estimates minimum-speed performance (a) between 35 °F and 47 °F using the intermediate-speed frosting-operation test at 35 °F and the minimum-speed test at 47 °F, and (b) below 35 °F assuming that minimum-speed and intermediate-speed performance are the same. In addition, DOE requests comment on including in certification reports for variable-speed heat pumps whether this alternative approach was used to determine the rating. Finally, DOE requests comment on whether any of the additional tests that could be used to further improve the accuracy of variable-speed heat pump performance estimates should be required in the test procedure.

4. Revised Heating Mode Test Procedure for Units Equipped With Variable Speed Compressors

In the November 2015 SNOPR, DOE revisited the heating season ratings procedure for variable speed heat pumps found in section 4.2.4 of Appendix M of 10 CFR part 430 subpart B. 80 FR at 69322 (Nov. 9, 2015).

DOE proposed as part of Appendix M1 that for variable speed units that limit the maximum speed operation below 17 °F and have a low cutoff temperature (temperature below which the unit will not operate in heat pump mode) less than 12 °F, the manufacturer could choose to calculate the maximum heating capacity and the corresponding energy usage for ambient temperatures less than 17 °F based on two maximum speed tests at: (1) 17 °F outdoor temperature, and (2) 2 °F outdoor temperature or at the low cutoff temperature, whichever is higher.[25] The proposal would have allowed manufacturers to choose to conduct one additional steady state test, at maximum compressor speed and at a low temperature of 2 °F or at a low cutoff temperature, whichever is higher. 80 FR at 69323 (Nov. 9, 2015).

Testing done by ORNL found that the unit efficiency at maximum speed below 17 °F is slightly higher than the extrapolated values in the current test procedure, and this proposed option would provide a more accurate prediction of heat pump low-ambient performance, not only for those units that limit maximum speed operation below 17 °F, but also for those that do not.[26] DOE therefore proposed to revise Appendix M1 such that, for variable speed units that do not limit maximum speed operation below 17 °F, manufacturers would also have the option to use this revised method if it is more representative of low ambient performance. 80 FR at 69323 (Nov. 9, 2015).

DOE developed the proposal based on review of the results of a limited number of tests. DOE requested test results and other data to show whether the impact on HSPF of the proposal is similar for other variable speed heat pumps, and also requested comment on the additional test burden of the proposed modification. 80 FR at 69323 (Nov. 9, 2015).

Several stakeholders provided comments in response to these requests for data and comments.

JCI supported the proposal on the condition that the tests be made optional, but at a higher temperature (*e.g.*, 10 degrees) so that more test labs can perform the test. (CAC TP: JCI, No. 66 at p. 22)

Lennox and ADP expressed concerns over the difficulty of testing at 2 °F for many labs, commenting that the test would greatly increase the burden on manufacturers as it would greatly increase the test time to achieve the 2 °F test point, possibly require expensive hardware upgrades for labs, or force manufacturers to use outside labs. (CAC TP: Lennox, No. 61 at p. 20; ADP, No. 59 at p. 13)

Rheem commented that the proposed 2 °F outdoor temperature introduces testing variability, and that the very low test temperature introduces a significant test burden because it is rare for manufacturers or independent labs to have such facilities. Rheem commented that there is no justification that the resulting HSPF results will more closely match the resulting energy costs to consumers. Major capital investment by manufacturers and independent-labs would be required to add this capability. (CAC TP: Rheem, No. 69 at p. 17)

Unico commented that most heat pumps are not able to be tested below 17 °F and that most test laboratories cannot test below 17 °F. Nevertheless, they also mentioned (a) public interest in heat pumps that operate at significantly lower temperatures and (b) manufacturers that are publishing data and promoting such cold climate heat pumps. Unico expressed support for a separate heat pump test standard for cold-weather heat pumps, indicating that such a test standard would require testing at 2 °F. (CAC TP: Unico, No. 63 at p. 13)

UTC/Carrier commented that the test point at 2 °F outdoor temperature is challenging for most test facilities (if it is possible at all). (CAC TP: UTC/Carrier, No. 62 at p. 22)

The California IOUs and ACEEE, NRDC, and ASAP commented that in response to industry's concerns over testing at 2 °F, they recommend that variable speed heat pumps be tested at 5 °F, in addition to the 17 °F cold temperature point. ACEEE, NRDC, and ASAP commented that requiring the 5 °F test seems to be a reasonable way to differentiate excellent cold-temperature performance, which is critical for customer acceptance nationally, and for mitigating winter peaks for utilities. The California IOUs noted that the European standard requires testing at 5 °F and that manufacturers participate in the global market and Europe, so that they must test at 5 °F. (CAC TP: California IOUs, No. 67 at p. 7; ACEEE, NRDC, and ASAP, No. 72 at p. 5)

NEEA and NPCC commented that they do not believe that the current test procedure for variable speed systems in any way delivers annual energy use or efficiency ratings that are reasonably reflective of an average use cycle. (CAC TP: NEEA and NPCC, No. 64 at p. 9)

The possible adoption of a very-low-temperature test for rating of variable speed heat pumps was also discussed during the CAC/HP ECS Working Group meetings, ultimately leading to Recommendation #5 in the Term Sheet, that a 5 °F ambient temperature optional test be adopted for variable speed heat pumps. (CAC ECS: ASRAC Term Sheet, No. 76 at p. 3) Given the consensus among Working Group members regarding this recommendation, DOE believes that the concerns expressed by the initial comments about this optional test would be resolved by adopting a 5 °F ambient temperature for the test rather than the 2 °F initially proposed.

In addition, DOE discussed in the November 2015 SNOPR the possibility of making an adjustment to the test procedure to address potential accuracy issues associated with estimation of minimum-speed heat pump performance for temperatures below 47 °F based on extrapolation of the results of tests conducted in 47 °F and 62 °F ambient temperatures. Specifically, testing by ORNL indicated that the HSPF may be over-predicted for heat pumps that do not allow use of the same minimum speed for ambient temperatures below 47 °F. 80 FR 69322–3 (Nov. 9, 2015). However, DOE did not propose to make this change in the November 2015 SNOPR, explaining that the modification of the heating load line equation would sufficiently alleviate the potential inaccuracy, making adjustment to the test procedure unnecessary. However, DOE did request comment on preferences for approaches to modification to the test procedure in case the modified heating load line equation was not adopted, describing approaches that would involve an additional test and an approach that would not require additional testing. *Id. This issue and DOE's proposal to resolve it is discussed in greater detail in section III.C.3.i.*

The revised variable speed heat pump test procedure proposed in this notice would include the following changes in Appendix M1.

- If the optional 5 °F full-speed test (to be designated $H4_2$) is conducted, full-speed performance for ambient temperatures between 5 °F and 17 °F would be calculated using interpolation between full-speed test measurements conducted at these two temperatures, rather than the current approach, which uses extrapolation of performance measured at 17 °F and 47 °F ambient temperatures. For all heat pumps for which the 5 °F full-speed test is not conducted, the extrapolation approach would still be used to represent performance for all ambient temperatures below 17 °F.

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[25] In the November 2015 SNOPR, DOE proposed that in the case that the low cutoff temperature is higher than 12 °F, the manufacturer would not be allowed to utilize this option for calculation of the maximum heating load capacity.

[26] Rice et al. (2015) Review of Test Procedure for Determining HSPFs of Residential Variable-Speed Heat pumps. (Docket No. EERE–2009–BT–TP–0004–0047).

- A target wet bulb temperature of 3.5 °F for the optional 5 °F test.
- If the optional 5 °F full-speed test is conducted, performance for ambient temperatures below 5 °F would be calculated using extrapolation below 5 °F using the same slopes (capacity vs. temperature and power input vs. temperature) as determined for the heat pump between 17 °F and 47 °F. Specifically, the extrapolation would be based on the 17 °F-to-47 °F slope rather than the 5 °F-to-17 °F slope. If the 47 °F full-speed test is conducted at a different speed than the 17 °F full-speed test, the extrapolation would be based on the standardized slope discussed in section III.B.7.
- Manufacturers would have to indicate in certification reports whether the 5 °F full-speed test was conducted.
- As proposed for Appendix M and discussed in section III.B.7, a 47 °F full-speed test, designated the $H1_N$ test, would be used to represent the heating capacity. However, for Appendix M1, this test would be conducted at the maximum speed at which the system controls would operate the compressor in normal operation in a 47 °F ambient temperature.
- If the heat pump limits the use of the minimum speed (measured in terms of RPM or power input frequency) of the heat pump when operating at ambient temperatures below 47 °F (*i.e.* does not allow use of speeds as low as the minimum speed used at 47 °F for any temperature below 47 °F), a modified calculation would be used to determine minimum-speed performance below 47 °F.

Development of these proposals and decisions regarding their details is explained further below (except for the last proposal, which is discussed in section III.C.3.i).

For heat pumps using the 5 °F test, the CAC/HP ECS Working Group Term Sheet recommended use of interpolation to calculate heat pump performance in the temperature range from 5 °F to 17 °F based on the test results for the 5 °F and 17 °F tests (CAC ECS: ASRAC Term Sheet, No. 76 at p. 3, Recommendation #5) DOE considered what approach to use for calculation of heat pump performance below 5 °F, with the understanding that extrapolation of the 5 °F-to-17 °F trend below 5 °F is not likely to be accurate because full-speed operation could be very different at 5 °F than it is at 17 °F. Although the November 2015 SNOPR primarily addressed cases where the compressor speed could be lower at the lower temperature (see, *e.g.* 80 FR at 69323 (Nov. 9, 2015)), the comments focus more on the possibility of higher speed at lower temperature. In any case, as indicated in this preamble, DOE does not believe such extrapolation is appropriate when the compressor speeds may be very different. DOE considered different approaches to calculate the performance below 5 °F and evaluated some of them using data obtained from the NEEP cold climate heat pump database.[27] Many of the heat pumps in the database have performance data for both 5 °F and for a lower ambient temperature. DOE evaluated for each such heat pump of the database how closely the performance at the lower ambient temperature could be predicted using the other available performance data. DOE concluded that a good approach is to apply the 17 °F-to-47 °F slope below 5 °F, for both capacity and power input. Using this approach, the lower-temperature capacity and power input were predicted within 10 percent for at least two thirds of the evaluated heat pumps.[28] DOE considers this to be acceptable accuracy for HSPF calculations, considering that the annual hours with temperature lower than 5 °F are limited, representing roughly one percent of heating season hours in Region IV. Hence, DOE has proposed an approach for extrapolation of heat pump performance for temperatures below 5 °F based on the slopes of the capacity and power input levels between 17 °F and 47 °F.

Issue 23: DOE requests comment on the proposals for evaluation of heat pump capacity and power input as a function of ambient temperature based on test measurements, both for cases where a 5 °F test is conducted and where it isn't.

DOE chose a target wet bulb temperature for the 5 °F test equal to 3.5 °F, corresponding to roughly 60 percent relative humidity which is consistent with the range of relative humidity of the other low temperature heating mode tests.

Issue 24: DOE requests comment on the target wet bulb temperature for the 5 °F test.

Issue 25: DOE requests general comments regarding its proposal to adopt an optional 5 °F test and regarding any other details of the related amendments proposed for calculation of HSPF.

As discussed in this preamble, DOE has proposed changing the ambient temperature requirement for the very-low-temperature heating mode test for variable-speed heat pumps from 2 °F to 5 °F. DOE notes that it proposed a 2 °F test for triple-capacity northern heat pumps in the June 2010 NOPR which was established as part of the test procedure in the June 2016 final rule. 81 FR at 37020 (June 8, 2016).

Issue 26: DOE requests comments on whether the very-low-temperature heating mode test for triple-capacity northern heat pumps should be changed to a 5 °F test for consistency with the proposed 5 °F variable-speed test.

IV. Procedural Issues and Regulatory Review

A. Review Under Executive Order 12866

The Office of Management and Budget (OMB) has determined that test procedure rulemakings do not constitute "significant regulatory actions" under section 3(f) of Executive Order 12866, Regulatory Planning and Review, 58 FR 51735 (Oct. 4, 1993). Accordingly, this action was not subject to review under the Executive Order by the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget.

B. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires preparation of an initial regulatory flexibility analysis (IFRA) for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, "Proper Consideration of Small Entities in Agency Rulemaking," 67 FR 53461 (August 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the DOE rulemaking process. 68 FR 7990. DOE has made its procedures and policies available on the Office of the General Counsel's Web site: *http://energy.gov/gc/office-general-counsel.*

DOE reviewed this proposed rule, which would amend the test procedure for CAC/HP, under the provisions of the Regulatory Flexibility Act and the procedures and policies published on February 19, 2003. DOE has estimated the impacts of the test procedure changes on small business manufacturers.

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[27] *http://www.neep.org/initiatives/high-efficiency-products/emerging-technologies/ashp/cold-climate-air-source-heat-pump.*

[28] In contrast, if extrapolation of performance based on the 5 °F and 17 °F tests was used below 5 °F, the capacity would be within the 10% tolerance for none of the heat pumps, and the power input would be within 10% for six percent of the analyzed heat pumps.

For the purpose of the regulatory flexibility analysis for this rule, the DOE adopts the Small Business Administration (SBA) definition of a small entity within this industry as a manufacturing enterprise with 1,250 employees or fewer. DOE used the small business size standards published by the SBA to determine whether any small entities would be required to comply with this rule. The size standards are codified at 13 CFR part 121. The standards are listed by North American Industry Classification System (NAICS) code and industry description and are available at ***https://www.sba.gov/sites/default/files/files/Size_Standards_Table.pdf.***

CAC/HP manufacturing is classified under NAICS 333415, "Air Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing." 70 FR 12395 (March 11, 2005). DOE reviewed publicly available data and contacted various companies on its complete list of manufacturers to determine whether they met the SBA's definition of a small business manufacturer. As a result of this review, DOE identified 22 manufacturers of CAC/HP that would be considered domestic small businesses with a total of less than 3 percent of the market sales.

Issue 27: DOE seeks comment on its estimate of the number of small entities that may be impacted by the proposed test procedure.

Potential impacts of the proposed test procedure on all manufacturers, including small businesses, come from impacts associated with the cost of proposed additional testing. DOE expects that many of the provisions proposed in this notice will result in no increase to test burden. DOE's proposals to use new heating load line equation provisions to calculate HSPF for heat pumps, new default values for indoor fan power consumption, and a new interpolation approach for COP of variable speed heat pumps are changes to calculations and do not require any additional time or investment from manufacturers. Similarly, DOE's proposal to require certification of the time delay used when testing coil-only units does not affect testing. DOE's proposal to test at new minimum external static pressure conditions would require manufacturers to test at different, but not additional test points using the same equipment and methodologies required by the current test procedure. DOE's proposal for single-package units to make the official test the test that does not include the secondary outdoor air enthalpy method measurement also does not require any additional testing. Similarly, DOE's proposal to include an optional test at 5 °F for variable speed heat pumps does not require manufacturers to do any additional testing. Other proposed provisions may increase test burden. DOE anticipates that its proposed changes to provisions for mini-split refrigerant pressure lines may cause labs and manufacturers to relocate pressure transducers or in a worst case scenario, build a separate satellite test instrumentation console for pressure measurements closer to the test samples. DOE estimates that building such a satellite console would constitute a one-time cost on the order of $1,000 per test room. DOE's proposal to modify the off mode test for units with self-regulated crankcase heaters could result in more significant increases to test burden, but for a small number of models. DOE estimates that the new provisions could add 8 hours per test for units with self-regulated crankcase heaters and an additional 8 hours for those units with self-regulated crankcase heaters that also have a compressor sound blanket. Sound blankets are premium features. DOE estimates that less than 25 percent of all units have self-regulated crankcase heaters and less than 5 percent have self-regulated crankcase heaters and sound blankets. DOE estimates the additional cost of testing to be $250 for units with self-regulating crankcase heaters and $500 for units with self-regulating crankcase heaters and sound blankets. DOE also estimates that testing of basic models may not have to be updated more than once every five years, and therefore the average incremental burden of testing one basic model may be one-fifth of these values when the cost is spread over several years.

DOE is proposing labeling requirements for the indoor and outdoor units of mobile home blower coil and coil-only systems and is also proposing that manufacturers include a specific designation in the installation instructions for these units. For further discussion of the proposed labeling requirements, see section III.C.1. As discussed in that section, DOE expects the additional cost to manufacturers associated with meeting the labeling requirement would be marginal as compared to the total production cost. The overall impact would be small.

As discussed in this preamble, DOE identified 22 domestic small business manufacturers of CAC/HP. Of these, only OUMs that operate their own manufacturing facilities (*i.e.,* are not private labelers selling only models manufactured by other entities) and OUM importing private labelers would be subject to the additional requirements for testing required by this proposed rule. DOE identified 12 such small businesses but was able to estimate the number of basic models associated only with nine of these.

DOE requires that only one combination associated with any given outdoor unit be laboratory tested. 10 CFR 429.16(b). The majority of CAC/HP offered by a manufacturer are split-system combinations that are not required to be laboratory tested but can be certified using an AEDM that does not require DOE testing of these units. DOE reviewed available data for the nine small businesses to estimate the incremental testing cost burden those firms might experience due to the revised test procedure. These manufacturers had an average of 35 models requiring testing. DOE determined the numbers of models using the AHRI Directory of Certified Product Performance, *www.ahridirectory.org/ahridirectory/pages/home.aspx.* As discussed, DOE estimates that less than 25 percent of models have self-regulating crankcase heaters and less than 5 percent have self-regulating crankcase heaters with blankets. Applying these estimates to the average 35 models for each small manufacturer results in an estimated two models with $500 per model in additional test costs and nine models with $250 per model in additional test costs as a result of the proposed changes. The additional testing cost for final certification of these models was therefore estimated at $3,250. Meanwhile, these certifications would be expected to last the CAC/HP life, estimated to be at least five years based on the time frame established in EPCA for DOE review of central air conditioner efficiency standards. Hence, average annual additional costs for these small business manufacturers to perform the tests as revised by the proposal is $650.

DOE does not expect ICMs to incur any additional burden as a result of the proposed changes because the changes for which DOE estimates there will be increased burden do not apply to ICMs. Only outdoor units include self-regulating crankcase heaters with or without blankets, and DOE assumes that ICM manufacturers do not produce indoor units that have components with off mode power consumption. Consequently, ICMs would be able to use the off mode power measurements acquired and certified by OUMs to meet the test procedure requirements for off mode. Regarding the proposed changes for mini-split refrigerant lines, DOE is not aware of any ICMs that maintain in-house test facilities. Consequently, the one-time cost associated with the proposed changes for mini-split refrigerant lines would not be incurred by the ICM. DOE also anticipates that the one-time cost is low enough that the per-test cost charged by independent labs that provide testing services to ICMs would not increase as a result of this proposed change.

Issue 28: DOE seeks comment on its estimate of the impact of the proposed test procedure amendments on small entities.

C. Review Under the Paperwork Reduction Act of 1995

Manufacturers of central air conditioners and heat pumps must certify to DOE that their products comply with any applicable energy conservation standards. In certifying compliance, manufacturers must test their products according to the DOE test procedures for central air conditioners and heat pumps, including any amendments adopted for those test procedures. DOE has established regulations for the certification and recordkeeping requirements for all covered consumer products and commercial equipment, including central air conditioners and heat pumps. 76 FR 12422 (March 7, 2011); 80 FR 5099 (Jan. 30, 2015). The collection-of-information requirement for the certification and recordkeeping is subject to review and approval by OMB under the Paperwork Reduction Act (PRA). This requirement has been approved by OMB under OMB control number 1910–1400. Public reporting burden for the certification is estimated to average 30 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number.

D. Review Under the National Environmental Policy Act of 1969

In this proposed rule, DOE proposes test procedure amendments that it expects will be used to develop and implement future energy conservation standards for central air conditioners and heat pumps. DOE has determined that this rule falls into a class of actions that are categorically excluded from review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and DOE's implementing regulations at 10 CFR part 1021. Specifically, this proposed rule would amend the existing test procedures without affecting the amount, quality or distribution of energy usage, and, therefore, would not result in any environmental impacts. Thus, this rulemaking is covered by Categorical Exclusion A5 under 10 CFR part 1021, subpart D, which applies to any rulemaking that interprets or amends an existing rule without changing the environmental effect of that rule. Accordingly, neither an environmental assessment nor an environmental impact statement is required.

DOE's CX determination for this proposed rule is available at *http://energy.gov/nepa/categorical-exclusion-cx-determinations-cx.*

E. Review Under Executive Order 13132

Executive Order 13132, "Federalism," 64 FR 43255 (August 4, 1999) imposes certain requirements on agencies formulating and implementing policies or regulations that preempt State law or that have Federalism implications. The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE has examined this proposed rule and has determined that it would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. EPCA governs and prescribes Federal preemption of State regulations as to energy conservation for the products that are the subject of this proposed rule. States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297(d)) No further action is required by Executive Order 13132.

F. Review Under Executive Order 12988

Regarding the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, "Civil Justice Reform," 61 FR 4729 (Feb. 7, 1996), imposes on Federal agencies the general duty to adhere to the following requirements: (1) Eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; (3) provide a clear legal standard for affected conduct rather than a general standard; and (4) promote simplification and burden reduction. Section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in sections 3(a) and 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, the proposed rule meets the relevant standards of Executive Order 12988.

G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. Public Law 104–4, sec. 201 (codified at 2 U.S.C. 1531). For a proposed regulatory action likely to result in a rule that may cause the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of $100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)) The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and Tribal governments on a proposed "significant intergovernmental mandate," and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect small governments. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820; also available at *http://energy.gov/gc/office-general-counsel.* DOE examined this proposed rule according to UMRA and its statement of policy and determined that the rule contains neither an intergovernmental mandate, nor a mandate that may result in the expenditure of $100 million or more in any year, so these requirements do not apply.

H. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105–277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

I. Review Under Executive Order 12630

DOE has determined, under Executive Order 12630, "Governmental Actions and Interference with Constitutionally Protected Property Rights" 53 FR 8859 (March 18, 1988), that this regulation would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

J. Review Under Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note) provides for agencies to review most disseminations of information to the public under guidelines established by each agency pursuant to general guidelines issued by OMB. OMB's guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE's guidelines were published at 67 FR 62446 (Oct. 7, 2002). DOE has reviewed this proposed rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

K. Review Under Executive Order 13211

Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use," 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to OMB, a Statement of Energy Effects for any proposed significant energy action. A "significant energy action" is defined as any action by an agency that promulgated or is expected to lead to promulgation of a final rule, and that: (1) Is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (3) is designated by the Administrator of OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

The proposed regulatory action to amend the test procedure for measuring the energy efficiency of central air conditioners and heat pumps is not a significant regulatory action under Executive Order 12866. Moreover, it would not have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as a significant energy action by the Administrator of OIRA. Therefore, it is not a significant energy action, and, accordingly, DOE has not prepared a Statement of Energy Effects.

L. Review Under Section 32 of the Federal Energy Administration Act of 1974

Under section 301 of the Department of Energy Organization Act (Pub. L. 95–91; 42 U.S.C. 7101), DOE must comply with section 32 of the Federal Energy Administration Act of 1974, as amended by the Federal Energy Administration Authorization Act of 1977. (15 U.S.C. 788; FEAA) Section 32 essentially provides in relevant part that, where a proposed rule authorizes or requires use of commercial standards, the notice of proposed rulemaking must inform the public of the use and background of such standards. In addition, section 32(c) requires DOE to consult with the Attorney General and the Chairman of the Federal Trade Commission (FTC) concerning the impact of the commercial or industry standards on competition.

The proposed rule incorporates testing methods contained in the following commercial standards: AHRI 210/240–2008 with Addendum 1 and 2, Performance Rating of Unitary Air Conditioning & Air-Source Heat Pump Equipment; and ANSI/AHRI 1230–2010 with Addendum 2, Performance Rating of Variable Refrigerant Flow Multi-Split Air Conditioning and Heat Pump Equipment. While the proposed test procedure is not exclusively based on AHRI 210/240–2008 or ANSI/AHRI 1230–2010, one component of the test procedure, namely test setup requirements, adopts language from AHRI 210/240–2008 without amendment; and another component of the test procedure, namely test setup and test performance requirements for multi-split systems, adopts language from ANSI/AHRI 1230–2010 without amendment. The Department has evaluated these standards and is unable to conclude whether they fully comply with the requirements of section 32(b) of the FEAA, (*i.e.,* that they were developed in a manner that fully provides for public participation, comment, and review). DOE will consult with the Attorney General and the Chairman of the FTC concerning the impact of these test procedures on competition, prior to prescribing a final rule.

M. Description of Materials Incorporated by Reference

In this SNOPR, DOE proposes to incorporate by reference (IBR) into the proposed Appendix M1 to subpart B of part 430 specific sections, figures, and tables of several test standards published by AHRI, ASHRAE, and AMCA that are already incorporated by reference into Appendix M to subpart B of part 430: ANSI/AHRI 210/240–2008 with Addenda 1 and 2, titled "Performance Rating of Unitary Air-Conditioning & Air-Source Heat Pump Equipment;" ANSI/AHRI 1230–2010 with Addendum 2, titled "Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air-Conditioning and Heat Pump Equipment;" ASHRAE 23.1–2010, titled "Methods of Testing for Rating the Performance of Positive Displacement Refrigerant Compressors and Condensing Units that Operate at Subcritical Temperatures of the Refrigerant;" ASHRAE Standard 37–2009, titled "Methods of Testing for Rating Electrically Driven Unitary Air-Conditioning and Heat Pump Equipment;" ASHRAE 41.1–2013, titled "Standard Method for Temperature Measurement;" ASHRAE 41.2–1987 (RA 1992), titled "Standard Methods for Laboratory Airflow Measurement;" ASHRAE 41.6–2014, titled "Standard Method for Humidity Measurement;"

ASHRAE 41.9–2011, titled "Standard Methods for Volatile-Refrigerant Mass Flow Measurements Using Calorimeters;" ASHRAE 116–2010, titled "Methods of Testing for Rating Seasonal Efficiency of Unitary Air Conditioners and Heat Pumps;" and AMCA 210–2007, titled "Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating."

ANSI/AHRI 210/240–2008 is an industry accepted test procedure that measures the cooling and heating performance of central air conditioners and heat pumps and is applicable to products sold in North America. The test procedure proposed in this SNOPR references various sections of ANSI/AHRI 210/240–2008 that address test setup, test conditions, and rating requirements. ANSI/AHRI 210/240–2008 is readily available on AHRI's Web site at *http://www.ahrinet.org/site/686/Standards/HVACR-Industry-Standards/Search-Standards.*

ANSI/AHRI 1230–2010 is an industry accepted test procedure that measures the cooling and heating performance of variable refrigerant flow (VRF) multi-split air conditioners and heat pumps and is applicable to products sold in North America. The test procedure proposed in this SNOPR for VRF multi-split systems references various sections of ANSI/AHRI 1230–2010 that address test setup, test conditions, and rating requirements. ANSI/AHRI 1230–2010 is readily available on AHRI's Web site at *http://www.ahrinet.org/site/686/Standards/HVACR-Industry-Standards/Search-Standards.*

ASHRAE 23.1–2010 is an industry accepted test procedure for rating the thermodynamic performance of positive displacement refrigerant compressors and condensing units that operate at subcritical temperatures. The test procedure proposed in this SNOPR references sections of ASHRAE 23.1–2010 that address requirements, instruments, methods of testing, and testing procedure specific to compressor calibration. ASHRAE 23.1–2010 can be purchased from ASHRAE's Web site at *https://www.ashrae.org/resources-publications.*

ASHRAE Standard 37–2009 is an industry accepted standard that provides test methods for determining the cooling capacity of unitary air conditioning equipment and the cooling or heating capacities, or both, of unitary heat pump equipment. The test procedure proposed in this SNOPR references various sections of ASHRAE Standard 37–2009 that address test conditions and test procedures. ASHRAE Standard 37–2009 can be purchased from ASHRAE's Web site at *https://www.ashrae.org/resources-publications.*

ASHRAE 41.1–2013 is an industry accepted method for measuring temperature in testing heating, refrigerating, and air conditioning equipment. The test procedure proposed in this SNOPR references sections of ASHRAE 41.1–2013 that address requirements, instruments, and methods for measuring temperature. ASHRAE 41.1–2013 can be purchased from ASHRAE's Web site at *https://www.ashrae.org/resources–publications.*

ASHRAE 41.2–1987 (RA 1992) is an industry accepted test method for measuring airflow. The test procedure proposed in this SNOPR references sections of ASHRAE 41.2–1987 (RA 1992) that address test setup and test methods. ASHRAE 41.2–1987 (RA 1992) can be purchased from ASHRAE's Web site at *https://www.ashrae.org/resources–publications.*

ASHRAE 41.6–2014 is an industry accepted test method for measuring humidity of moist air. The test procedure proposed in this SNOPR references sections of ASHRAE 41.6–2014 that address requirements, instruments, and methods for measuring humidity. ASHRAE 41.6–2014 can be purchased from ASHRAE's Web site at *https://www.ashrae.org/resources–publications.*

ASHRAE 41.9–2011 is an industry accepted standard that provides recommended practices for measuring the mass flow rate of volatile refrigerants using calorimeters. The test procedure proposed in this SNOPR references sections of ASHRAE 41.9–2011 that address requirements, instruments, and methods for measuring refrigerant flow during compressor calibration. ASHRAE 41.9–2011 can be purchased from ASHRAE's Web site at *https://www.ashrae.org/resources–publications.*

ANSI/ASHRAE Standard 116–2010 is an industry accepted standard that provides test methods and calculation procedures for determining the capacities and cooling seasonal efficiency ratios for unitary air-conditioning, and heat pump equipment and heating seasonal performance factors for heat pump equipment. The test procedure proposed in this SNOPR references various sections of ANSI/ASHRAE 116–2010 that addresses test methods and calculations. ANSI/ASHRAE Standard 116–2010 can be purchased from ASHRAE's Web site at *https://www.ashrae.org/resources–publications.*

AMCA 210–2007 is an industry accepted standard that establishes uniform test methods for a laboratory test of a fan or other air moving device to determine its aerodynamic performance in terms of airflow rate, pressure developed, power consumption, air density, speed of rotation, and efficiency for rating or guarantee purposes. The test procedure in this SNOPR references various sections of AMCA 210–2007 that address test conditions. AMCA 210–2007 can be purchased from AMCA's Web site at *http://www.amca.org/store/index.php.*

V. Public Participation

A. Attendance at the Public Meeting

The time, date, and location of the public meeting are listed in the **DATES** and **ADDRESSES** sections at the beginning of this document. If you plan to attend the public meeting, please notify the Appliance and Equipment Standards staff at (202) 586–6636 or *Appliance_Standards_Public_Meetings@ee.doe.gov.*

Please note that foreign nationals participating in the public meeting are subject to advance security screening procedures which require advance notice prior to attendance at the public meeting. If a foreign national wishes to participate in the public meeting, please inform DOE as soon as possible by contacting Ms. Regina Washington at (202) 586–1214 or by email: *Regina.Washington@ee.doe.gov* so that the necessary procedures can be completed.

DOE requires visitors to have laptops and other devices, such as tablets, checked upon entry into the building. Any person wishing to bring these devices into the Forrestal Building will be required to obtain a property pass. Visitors should avoid bringing these devices, or allow an extra 45 minutes to check in. Please report to the visitor's desk to have devices checked before proceeding through security.

Due to the REAL ID Act implemented by the Department of Homeland Security (DHS), there have been recent changes regarding ID requirements for individuals wishing to enter Federal buildings from specific states and U.S. territories. Driver's licenses from the following states or territory will not be accepted for building entry and one of the alternate forms of ID listed below will be required. DHS has determined that regular driver's licenses (and ID cards) from the following jurisdictions are not acceptable for entry into DOE facilities: Alaska, American Samoa, Arizona, Louisiana, Maine, Massachusetts, Minnesota, New York, Oklahoma, and Washington. Acceptable alternate forms of Photo-ID include: U.S. Passport or Passport Card; an Enhanced

Driver's License or Enhanced ID-Card issued by the states of Minnesota, New York or Washington (Enhanced licenses issued by these states are clearly marked Enhanced or Enhanced Driver's License); a military ID or other Federal government issued Photo-ID card.

In addition, you can attend the public meeting via webinar. Webinar registration information, participant instructions, and information about the capabilities available to webinar participants will be published on DOE's Web site at: *https://www1.eere.energy.gov/buildings/appliance_standards/standards.aspx?productid=48&action=viewlive.* Participants are responsible for ensuring their systems are compatible with the webinar software.

B. Procedure for Submitting Prepared General Statements for Distribution

Any person who has plans to present a prepared general statement may request that copies of his or her statement be made available at the public meeting. Such persons may submit requests, along with an advance electronic copy of their statement in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format, to the appropriate address shown in the **ADDRESSES** section at the beginning of this document. The request and advance copy of statements must be received at least one week before the public meeting and may be emailed, hand-delivered, or sent by mail. DOE prefers to receive requests and advance copies via email. Please include a telephone number to enable DOE staff to make follow-up contact, if needed.

C. Conduct of the Public Meeting

DOE will designate a DOE official to preside at the public meeting and may also use a professional facilitator to aid discussion. The meeting will not be a judicial or evidentiary-type public hearing, but DOE will conduct it in accordance with section 336 of EPCA (42 U.S.C. 6306). A court reporter will be present to record the proceedings and prepare a transcript. DOE reserves the right to schedule the order of presentations and to establish the procedures governing the conduct of the public meeting. After the public meeting, interested parties may submit further comments on the proceedings as well as on any aspect of the rulemaking until the end of the comment period.

The public meeting will be conducted in an informal, conference style. DOE will present summaries of comments received before the public meeting, allow time for prepared general statements by participants, and encourage all interested parties to share their views on issues affecting this rulemaking. Each participant will be allowed to make a general statement (within time limits determined by DOE), before the discussion of specific topics. DOE will allow, as time permits, other participants to comment briefly on any general statements.

At the end of all prepared statements on a topic, DOE will permit participants to clarify their statements briefly and comment on statements made by others. Participants should be prepared to answer questions by DOE and by other participants concerning these issues. DOE representatives may also ask questions of participants concerning other matters relevant to this rulemaking. The official conducting the public meeting will accept additional comments or questions from those attending, as time permits. The presiding official will announce any further procedural rules or modification of the above procedures that may be needed for the proper conduct of the public meeting.

A transcript of the public meeting will be included in the docket, which can be viewed as described in the Docket section at the beginning of this document. In addition, any person may buy a copy of the transcript from the transcribing reporter.

D. Submission of Comments

DOE will accept comments, data, and information regarding this proposed rule no later than the date provided in the **DATES** section at the beginning of this proposed rule. Interested parties may submit comments using any of the methods described in the **ADDRESSES** section at the beginning of this notice.

Under EPCA, DOE may not amass more than 270 days of public comment during a test procedure rulemaking. (42 U.S.C. 6293(b)(2)) Since the beginning of this test procedure rulemaking on June 2, 2010 (75 FR 31223), DOE has provided 216 days of public comment, in all.[29] Thus, DOE is providing 30 days of public comment for this SNOPR to ensure that parties have a chance to comment throughout the rest of this rulemaking.

Submitting comments via regulations.gov. The *regulations.gov* Web page will require you to provide your name and contact information. Your contact information will be viewable to DOE Building Technologies staff only. Your contact information will not be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment or in any documents attached to your comment. Any information that you do not want to be publicly viewable should not be included in your comment, nor in any document attached to your comment. Persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to *regulations.gov* information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information (CBI)). Comments submitted through *regulations.gov* cannot be claimed as CBI. Comments received through the Web site will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section.

DOE processes submissions made through *regulations.gov* before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not be viewable for up to several weeks. Please keep the comment tracking number that *regulations.gov* provides after you have successfully uploaded your comment.

Submitting comments via email, hand delivery, or mail. Comments and documents submitted via email, hand delivery, or mail also will be posted to *regulations.gov.* If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information on a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments

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[29] This includes the comment period from the April 2011 SNOPR and the comment period extension, the October 2011 SNOPR and its comment period extension, and the November 2015 SNOPR. *See* 76 FR 18105 (April 1, 2011); 76 FR 30555 (May 26, 2011); 76 FR 65616 (Oct. 24, 2011); 76 FR 79135 (Dec. 21, 2011); 80 FR 69277 (Nov. 9, 2015).

Include contact information each time you submit comments, data, documents, and other information to DOE. If you submit via mail or hand delivery, please provide all items on a CD, if feasible. It is not necessary to submit printed copies. No facsimiles (faxes) will be accepted.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide documents that are not secured, written in English and free of any defects or viruses. Documents should not contain special characters or any form of encryption and, if possible, they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. According to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email, postal mail, or hand delivery two well-marked copies: One copy of the document marked confidential including all the information believed to be confidential, and one copy of the document marked non-confidential with the information believed to be confidential deleted. Submit these documents via email or on a CD, if feasible. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) A description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person which would result from public disclosure; (6) when such information might lose its confidential character due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

E. Issues on Which DOE Seeks Comment

Although DOE welcomes comments on any aspect of this proposal, DOE is particularly interested in receiving comments and views of interested parties concerning the following issues:

Issue 1: DOE requests comment on its proposed certification requirements for outdoor units with no match. Also, DOE seeks comment on what fin style options should be considered as options for CCMS database data entry.

Issue 2: DOE requests comment on its proposed language in 429.16 related to allowable ICM ratings and compliance with regional standards.

Issue 3: DOE requests comment on its proposal to allow a one-sided tolerance on represented values of cooling and heating capacity that allows underrating of any amount but only overrating up to 5 percent.

Issue 4: DOE seeks comments from interested parties about its proposal to impose time delays to allow approach to equilibrium for measurements of off-mode power for units with self-regulating crankcase heaters. DOE requests comment regarding the 4-hour and 8-hour delay times proposed for units without and with compressor sound blankets, respectively.

Issue 5: DOE requests comment on its proposal to limit the internal volume of pressure measurement systems for cooling/heating heat pumps where the pressure measurement location may switch from liquid to vapor state when changing operating modes and for all systems undergoing cyclic tests. DOE also requests comment specifically on (a) the proposed 0.25 cubic inch per 12,000 Btu/h maximum internal volume for such systems, and (b) the proposals for default internal volumes to assign to pressure transducers and gauges of 0.1 and 0.2 cubic inches, respectively.

Issue 6: DOE requests comment on the proposal to require the use of a bin-by-bin method to calculate EER and COP for intermediate-speed operation for SEER and HSPF calculations for variable-speed units.

Issue 7: DOE requests comment on its proposed modifications to requirements when using the outdoor air enthalpy method as the secondary test method, including its proposal that the official test be conducted without the outdoor air-side test apparatus connected.

Issue 8: DOE requests comments on its proposal to require certification reports for coil-only units to indicate whether testing was conducted using a time-delay relay to provide an off-cycle time delay, and the duration of the time delay.

Issue 9: DOE requests comment on its proposal to limit the NGIFS of tested coil-only single-split systems to 2.0 sq.in/Btu/hr.

Issue 10: DOE requests comments on its proposal to require that full-speed tests conducted in 17 °F and 35 °F ambient temperatures use the maximum compressor speed at which the system controls would operate the compressor in normal operation in a 17 °F ambient temperatures. DOE requests comment on the proposed approach of using standardized slope factors for calculation of representative performance at 47 °F ambient temperature for heat pumps for which the 47 °F full-speed test cannot be conducted at the same speed as the 17 °F full-speed test. Further, DOE requests comment on the specific slope factors proposed, and/or data to show that different slope factors should be used.

Issue 11: DOE requests comments on its proposal to allow the full speed test in 47 °F ambient temperature that is used to represent heat pump heating capacity, to use any speed that is no lower than used for the 95 °F full-speed cooling test for Appendix M.

Issue 12: DOE requests comments on its clarifications regarding use of break-in, including use of the certified break-in period for each compressor of the unit, regardless of who conducts the test, prior to any test period used to measure performance.

Issue 13: DOE requests comments on removing from section 2.2.3.a of Appendix M the 5 percent tolerance for part load operation when comparing the sum of nominal capacities of the indoor units and the intended system part load capacity.

Issue 14: DOE requests comment on whether removing the statement about insulating or sealing cased coils in Appendix M, section 2.2.c would be sufficient to avoid confusion regarding whether sealing of duct connections is allowed.

Issue 15: DOE requests comments on the proposed minimum external static pressure requirements.

DOE proposes to establish the certification requirements for Appendix M1 to require manufacturers to certify the kind(s) of CAC/HP associated with the minimum external static pressure used in testing or rating (*i.e.,* ceiling-mount, wall-mount, mobile home, low-static, mid-static, small duct high velocity, space constrained, or conventional/not otherwise listed). In the case of mix-match ratings for multi-split, multi-head mini-split, and multi-circuit systems, manufacturers may select two kinds. In addition, models of outdoor units for which some combinations distributed in commerce meet the definition for ceiling-mount and wall-mount blower coil system are still required to have at least one coil-only rating (which uses the 441W/1000 scfm default fan power value) that is representative of the least efficient coil distributed in commerce with the particular model of outdoor unit. Mobile home systems are also required to have at least one coil-only rating that is representative of the least efficient coil distributed in commerce with the particular model of outdoor unit. DOE proposes to specify a default fan power value of 406W/1000 scfm, rather than 441W/1000 scfm, for mobile home coil-only systems. Details of this proposal are discussed in detail in section III.C.2.

Issue 16: DOE requests comment on the proposed definitions for kinds of CAC/HP associated with administering minimum external static pressure requirements.

Issue 17: DOE requests comments on not including a reduced minimum external static pressure requirement for blower coil or single-package systems tested with a condensing furnace.

Issue 18: DOE requests comment on the proposed default fan power value for coil-only mobile home systems. DOE also requests mobile home indoor fan performance data for units of all capacities and that use all available motor technologies in order to allow confirmation that the proposed default value is a good representation for mobile home units.

Issue 19: DOE requests comments on its proposed definition for mobile home coil-only unit.

Issue 20: DOE requests comments on the adjustments to the proposals for calculating HSPF for heat pumps and SEER for variable-speed heat pumps.

Issue 21: DOE requests comments on the adjusted values of minimum HSPF based on the HSPF efficiency levels recommended by the CAC/HP ECS Working Group.

Issue 22: DOE requests comment on its proposal to require use of an alternative HSPF rating approach (for heat pumps that raise minimum compressor speed in ambient temperatures that impact the HSPF calculation) that estimates minimum-speed performance (a) between 35 °F and 47 °F using the intermediate-speed frosting-operation test at 35 °F and the minimum-speed test at 47 °F, and (b) below 35 °F assuming that minimum-speed and intermediate-speed performance are the same. In addition, DOE requests comment on including in certification reports for variable-speed heat pumps whether this alternative approach was used to determine the rating. Finally, DOE requests comment on whether any of the additional tests that could be used to further improve the accuracy of variable-speed heat pump performance estimates should be required in the test procedure.

Issue 23: DOE requests comment on the proposals for evaluation of heat pump capacity and power input as a function of ambient temperature based on test measurements, both for cases where a 5 °F test is conducted and where it isn't.

Issue 24: DOE requests comment on the target wet bulb temperature for the 5 °F test.

Issue 25: DOE requests general comments regarding its proposal to adopt an optional 5 °F test and regarding any other details of the related amendments proposed for calculation of HSPF.

Issue 26: DOE requests comments on whether the very-low-temperature heating mode test for triple-capacity northern heat pumps should be changed to a 5 °F test for consistency with the proposed 5 °F variable-speed test.

Issue 27: DOE seeks comment on its estimate of the number of small entities that may be impacted by the proposed test procedure.

Issue 28: DOE seeks comment on its estimate of the impact of the proposed test procedure amendments on small entities.

VI. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this proposed rule.

List of Subjects

10 CFR Part 429

Administrative practice and procedure, Confidential business information, Energy conservation, Reporting and recordkeeping requirements.

10 CFR Part 430

Administrative practice and procedure, Confidential business information, Energy conservation, Energy conservation test procedures, Household appliances, Imports, Incorporation by reference, Intergovernmental relations, Small businesses.

Issued in Washington, DC, on August 1, 2016.

Kathleen B. Hogan,

Deputy Assistant Secretary for Energy Efficiency, Energy Efficiency and Renewable Energy.

For the reasons stated in the preamble, DOE is proposing to amend parts 429 and 430 of chapter II of title 10, subpart B, Code of Federal Regulations, as set forth below:

PART 429—CERTIFICATION, COMPLIANCE, AND ENFORCEMENT FOR CONSUMER PRODUCTS AND COMMERCIAL AND INDUSTRIAL EQUIPMENT

■ 1. The authority citation for part 429 continues to read as follows:

Authority: 42 U.S.C. 6291–6317.

■ 2. Section 429.11 is amended by revising paragraph (a) to read as follows:

§ 429.11 General sampling requirements for selecting units to be tested.

(a) When testing of covered products or covered equipment is required to comply with section 323(c) of the Act, or to comply with rules prescribed under sections 324, 325, or 342, 344, 345 or 346 of the Act, a sample comprised of production units (or units representative of production units) of the basic model being tested must be selected at random and tested, and must meet the criteria found in §§ 429.14 through 429.62. Components of similar design may be substituted without additional testing if the substitution does not affect energy or water consumption. Any represented values of measures of energy efficiency, water efficiency, energy consumption, or water consumption for all individual models represented by a given basic model must be the same, except for central air conditioners and central air conditioning heat pumps, as specified in § 429.16.

* * * * *

■ 3. Section 429.16 is amended by:
■ a. Revising paragraph (a)(1);
■ b. Redesignating paragraphs (a)(3) and (a)(4) as (a)(4) and (a)(5) and revising newly designated (a)(4)(i);
■ c. Adding new paragraph (a)(3);
■ d. Revising paragraph (b)(2)(i);
■ e. Revising the introductory text of paragraph (b)(3)(i), and revising paragraphs (b)(3)(iii) and (b)(3)(iv);
■ f. Revising paragraphs (c)(1)(i)(B), (c)(3), (d)(3) and (d)(4);
■ g. Revising paragraphs (e)(2), (e)(3) and (e)(4); and
■ h. Revising paragraphs (f) introductory text, (f)(1), (f)(2), (f)(4), and (f)(5).

The revisions and addition read as follows:

§ 429.16 Central air conditioners and central air conditioning heat pumps.

(a) *Determination of Represented Value*—(1) *Required represented values.* Determine the represented values (including SEER, EER, HSPF, $P_{W,OFF}$, cooling capacity, and heating capacity, as applicable) for the individual models/combinations (or "tested combinations") specified in the following table.

Category	Equipment subcategory	Required represented values
Single-Package Unit	Single-Package AC (including Space-Constrained).	Every individual model distributed in commerce.
	Single-Package HP (including Space-Constrained).	
Outdoor Unit and Indoor Unit (Distributed in Commerce by OUM).	Single-Split-System AC with Single-Stage or Two-Stage Compressor (including Space-Constrained and Small-Duct, High Velocity Systems (SDHV)).	Every individual combination distributed in commerce, including all coil-only and blower coil combinations. Every outdoor unit and indoor unit combination, must have a coil-only rating. For each model of outdoor unit, this must include at least one coil-only value that is representative of the least efficient combination distributed in commerce with the particular model of outdoor unit.
	Single-Split-System AC with Other Than Single-Stage or Two-Stage Compressor (including Space-Constrained and SDHV).	Every individual combination distributed in commerce, including all coil-only and blower coil combinations.
	Single-Split-System HP (including Space-Constrained and SDHV).	Every individual combination distributed in commerce.
	Multi-Split, Multi-Circuit, or Multi-Head Mini-Split Split System—non-SDHV.	For each model of outdoor unit, at a minimum, a non-ducted "tested combination." For any model of outdoor unit also sold with models of ducted indoor units, a ducted "tested combination." When determining represented values on or after January 1, 2023, the ducted "tested combination" must comprise the highest static variety of ducted indoor unit distributed in commerce (*i.e.*, conventional, mid-static, or low-static). Additional representations are allowed, as described in paragraph (c)(3)(i) of this section.
	Multi-Split, Multi-Circuit, or Multi-Head Mini-Split Split System—SDHV.	For each model of outdoor unit, an SDHV "tested combination." Additional representations are allowed, as described in paragraph (c)(3)(ii) of this section.
Indoor Unit Only Distributed in Commerce by ICM).	Single-Split-System Air Conditioner (including Space-Constrained and SDHV).	Every individual combination distributed in commerce.
	Single-Split-System Heat Pump (including Space-Constrained and SDHV).	
	Multi-Split, Multi-Circuit, or Multi-Head Mini-Split Split System—SDHV.	For a model of indoor unit within each basic model, an SDHV "tested combination." Additional representations are allowed, as described in section (c)(3)(ii) of this section.
Outdoor Unit with no Match		Every model of outdoor unit distributed in commerce (tested with a model of coil-only indoor unit as specified in paragraph (b)(2)(i) of this section).

* * * * *

(3) *Refrigerants.* If a model of outdoor unit (used in a single-split, multi-split, multi-circuit, multi-head mini-split, and/or outdoor unit with no match system) is distributed in commerce with multiple refrigerants, a manufacturer must determine all represented values for each refrigerant that can be used in an individual combination of the basic model (including outdoor units with no match or "tested combinations") without voiding the manufacturer's warranty. This requirement may apply across the listed categories in the table in paragraph (a)(1) of this section. If the warranty information specifies acceptable refrigerant characteristics rather than specific refrigerants and HCFC–22 meets these characteristics, a manufacturer must determine represented values (including SEER, EER, HSPF, $P_{W,OFF}$, cooling capacity, and heating capacity, as applicable) for, at a minimum, an outdoor unit with no match. If a model of outdoor unit (used in a single-split, multi-split, multi-circuit, multi-head mini-split, and/or outdoor unit with no match system) is distributed in commerce without a specific refrigerant specified or not charged with a specified refrigerant from the point of manufacture, if the unit is shipped requiring addition of more than a pound of refrigerant to meet the charge recommended by the manufacturer's installation instructions (or section 2.2.5 of appendix M or appendix M1), or if the unit is shipped with any amount of charge of R–407C, a manufacturer must determine represented values (including SEER, EER, HSPF, $P_{W,OFF}$, cooling capacity, and heating capacity, as applicable) for, at a minimum, an outdoor unit with no match.

(4) * * *

(i) *Regional.* A basic model may only be certified as compliant with a regional standard if all individual combinations within that basic model meet the regional standard for which it is certified. A model of outdoor unit that is certified below a regional standard can only be rated and certified as compliant with a regional standard if the model of outdoor unit has a unique model number and has been certified as a different basic model for distribution in each region. An ICM cannot certify an individual combination with a rating that is compliant with a regional standard if the individual combination includes a model of outdoor unit that the OUM has certified with a rating that is not compliant with a regional standard. Conversely, an ICM cannot certify an individual combination with a rating that is not compliant with a regional standard if the individual combination includes a model of outdoor unit that an OUM has certified with a rating that is compliant with a regional standard.

* * * * *

(b) * * *

(2) *Individual model/combination selection for testing.* (i) The table identifies the minimum testing requirements for each basic model that includes multiple individual models/combinations; if a basic model spans multiple categories listed in the table, multiple testing requirements apply. For each basic model that includes only one individual model/combination, test that individual model/combination. For single-split-system non-space-constrained air conditioners and heat pumps, when testing is required in accordance with 10 CFR part 430, subpart B, appendix M1, these requirements do not apply until July 1, 2024, provided that the manufacturer is certifying compliance of all basic models using an AEDM in accordance with paragraph (c)(1)(i)(B) of this section and paragraph (e)(2)(i)(A) of § 429.70.

Category	Equipment subcategory	Must test:	With:
Single-Package Unit	Single-Package AC (including Space-Constrained). Single-Package HP (including Space-Constrained).	The lowest SEER individual model.	N/A.
Outdoor Unit and Indoor Unit (Distributed in Commerce by OUM).	Single-Split-System AC with Single-Stage or Two-Stage Compressor (including Space-Constrained and Small-Duct, High Velocity Systems (SDHV)).	The model of outdoor unit.	A model of coil-only indoor unit meeting the requirements of section 2.2h of appendix M or M1 to subpart B of part 430.
	Single-Split-System AC with Other Than Single-Stage or Two-Stage Compressor (including Space-Constrained and SDHV). Single-Split-System HP (including Space-Constrained and SDHV).	The model of outdoor unit.	A model of indoor unit. If the tested model of indoor unit is coil-only, it must meet the requirements of section 2.2h of appendix M or M1 to subpart B of part 430.
	Multi-Split, Multi-Circuit, or Multi-Head Mini-Split Split System—non-SDHV.	The model of outdoor unit.	At a minimum, a "tested combination" composed entirely of non-ducted indoor units. For any models of outdoor units also sold with models of ducted indoor units, test a second "tested combination" composed entirely of ducted indoor units (in addition to the non-ducted combination). If testing under appendix M1 to subpart B of part 430, the ducted "tested combination" must comprise the highest static variety of ducted indoor unit distributed in commerce (*i.e.*, conventional, mid-static, or low-static).
	Multi-Split, Multi-Circuit, or Multi-Head Mini-Split Split System—SDHV.	The model of outdoor unit.	A "tested combination" composed entirely of SDHV indoor units.
Indoor Unit Only (Distributed in Commerce by ICM).	Single-Split-System Air Conditioner (including Space-Constrained and SDHV).	A model of indoor unit	The least efficient model of outdoor unit with which it will be paired where the least efficient model of outdoor unit is the model of outdoor unit in the lowest SEER combination as certified by the OUM. If there are multiple models of outdoor unit with the same lowest SEER represented value, the ICM may select one for testing purposes.
	Single-Split-System Heat Pump (including Space-Constrained and SDHV).	Nothing, as long as an equivalent air conditioner basic model has been tested. If an equivalent air conditioner basic model has not been tested, must test a model of indoor unit.	
	Multi-Split, Multi-Circuit, or Multi-Head Mini-Split Split System—SDHV.	A model of indoor unit	A "tested combination" composed entirely of SDHV indoor units, where the outdoor unit is the least efficient model of outdoor unit with which the SDHV indoor unit will be paired. The least efficient model of outdoor unit is the model of outdoor unit in the lowest SEER combination as certified by the OUM. If there are multiple models of outdoor unit with the same lowest SEER represented value, the ICM may select one for testing purposes.
Outdoor Unit with No Match		The model of outdoor unit.	A model of coil-only indoor unit meeting the requirements of section 2.2e of appendix M or M1 to subpart B of part 430.

* * * * *

(3) *Sampling plans and represented values.* For individual models (for single-package systems) or individual combinations (for split-systems, including "tested combinations" for multi-split, multi-circuit, and multi-head mini-split systems) with represented values determined through testing, each individual model/combination (or "tested combination") must have a sample of sufficient size

tested in accordance with the applicable provisions of this subpart. For heat pumps (other than heating-only heat pumps), all units of the sample population must be tested in both the cooling and heating modes and the results used for determining all representations. The represented values for any individual model/combination must be assigned such that:

* * * * *

(iii) *Cooling Capacity.* The represented value of cooling capacity must be a self-declared value that is no more than 105 percent of the mean of the cooling capacities measured for the units in the sample, rounded:

(A) To the nearest 100 Btu/h if cooling capacity is less than 20,000 Btu/h,

(B) To the nearest 200 Btu/h if cooling capacity is greater than or equal to 20,000 Btu/h but less than 38,000 Btu/h, and

(C) To the nearest 500 Btu/h if cooling capacity is greater than or equal to 38,000 Btu/h and less than 65,000 Btu/h.

(iv) *Heating Capacity.* The represented value of heating capacity must be a self-declared value that is no more than 105 percent of the mean of the heating capacities measured for the units in the sample, rounded:

(A) To the nearest 100 Btu/h if heating capacity is less than 20,000 Btu/h,

(B) To the nearest 200 Btu/h if heating capacity is greater than or equal to 20,000 Btu/h but less than 38,000 Btu/h, and

(C) To the nearest 500 Btu/h if heating capacity is greater than or equal to 38,000 Btu/h and less than 65,000 Btu/h.

(c) * * *

(1) * * *

(i) * * *

(B) The representative values of the measures of energy efficiency or energy consumption through the application of an AEDM in accordance with paragraph (d) of this section and § 429.70. An AEDM may only be used to determine represented values for individual models or combinations in a basic model other than the individual model or combination(s) required for mandatory testing under paragraph (b)(2) of this section, except that, for single-split, non-space-constrained systems, when testing is required in accordance with 10 CFR part 430, subpart B, appendix M1, an AEDM may be used to rate the individual model or combination(s) required for mandatory testing under paragraph (b)(2) of this section until July 1, 2024, in accordance with paragraph (e)(2)(i)(A) of § 429.70.

* * * * *

(3) *For multi-split systems, multi-circuit systems, and multi-head mini-split systems.* The following applies:

(i) For basic models that include additional varieties of ducted indoor units (*i.e.*, conventional, low-static, or mid-static) other than the one for which representation is required in paragraph (a)(1) of this section, if a manufacturer chooses to make a representation, the manufacturer must conduct testing of a tested combination in accordance with 10 CFR part 430, subpart B, appendix M1 and according to the requirements in paragraph (b)(3)(i) of this section.

(ii) For basic models composed of both non-ducted and ducted combinations, the represented value based on testing in accordance with 10 CFR part 430, subpart B, appendix M for the mixed non-ducted/ducted combination is the mean of the represented values for the non-ducted and ducted combinations as determined in accordance with paragraph (b)(3)(i) of this section. For basic models that include mixed combinations of indoor units (any two kinds of non-ducted, low-static, mid-static, and conventional ducted indoor units), the represented value based on testing in accordance with 10 CFR part 430, subpart B, appendix M1 for the mixed combination is the mean of the represented values for the individual component combinations as determined in accordance with paragraph (b)(3)(i) of this section.

(iii) For basic models composed of both SDHV and non-ducted or ducted combinations, the represented value based on testing in accordance with 10 CFR part 430, subpart B, appendix M for the mixed SDHV/non-ducted or SDHV/ducted combination is the mean of the represented values for the SDHV, non-ducted, or ducted combinations, as applicable, as determined in accordance with paragraph (b)(3)(i) of this section. For basic models including mixed combinations of SDHV and another kind of indoor unit (any of non-ducted, low-static, mid-static, and conventional ducted), the represented value based on testing in accordance with 10 CFR part 430, subpart B, appendix M1 for the mixed SDHV/other combination is the mean of the represented values for the SDHV and other tested combination as determined in accordance with paragraph (b)(3)(i) of this section.

(iv) All other individual combinations of models of indoor units for the same model of outdoor unit for which the manufacturer chooses to make representations must be rated as separate basic models, and the provisions of paragraphs (b)(1) through (3) and (c)(3)(i) through(iii) of this section apply.

(v) With respect to $P_{W,OFF}$ only, for every individual combination (or "tested combination") within a basic model tested pursuant to paragraph (b)(2) of this section, but for which $P_{W,OFF}$ testing was not conducted, the representative values of $P_{W,OFF}$ may be assigned through either:

(A) The testing result from an individual model or combination of similar off-mode construction, or

(B) Application of an AEDM in accordance with paragraph (d) of this section and § 429.70.

(d) * * *

(3) Cooling capacity. The represented value of cooling capacity of an individual model/combination must be no greater than 105% of the cooling capacity output simulated by the AEDM.

(4) Heating capacity. The represented value of heating capacity of an individual model/combination must be no greater than 105% of the heating capacity output simulated by the AEDM.

(e) * * *

(2) *Public product-specific information.* Pursuant to § 429.12(b)(13), for each individual model (for single-package systems) or individual combination (for split–systems, including outdoor units with no match and "tested combinations" for multi-split, multi-circuit, and multi-head mini-split systems), a certification report must include the following public product-specific information: The seasonal energy efficiency ratio (SEER in British thermal units per Watt-hour (Btu/W-h)); the average off mode power consumption ($P_{W,OFF}$ in Watts); the cooling capacity in British thermal units per hour (Btu/h); the region(s) in which the basic model can be sold; when certifying compliance with amended energy conservation standards, the kind(s) of air conditioner or heat pump associated with the minimum external static pressure used in testing or rating (ceiling-mount, wall-mount, mobile home, low-static, mid-static, small duct high velocity, space constrained, or conventional/not otherwise listed); and

(i) For heat pumps, the heating seasonal performance factor (HSPF in British thermal units per Watt-hour (Btu/W-h));

(ii) For central air conditioners (excluding space constrained products), the energy efficiency ratio (EER in British thermal units per Watt-hour (Btu/W-h));

(iii) For single-split-systems, whether the represented value is for a coil-only or blower coil system;

(iv) For multi-split, multiple-circuit, and multi-head mini-split systems (including VRF and SDHV), when certifying compliance with current energy conservation standards, whether the represented value is for a non-ducted, ducted, mixed non-ducted/ducted system, SDHV, mixed non-ducted/SDHV system, or mixed ducted/SDHV system;

(v) For all split systems including outdoor units with no match, the refrigerant.

(3) *Basic and individual model numbers.* The basic model number and individual model number(s) required to be reported under § 429.12(b)(6) must consist of the following:

Equipment type	Basic model No.	Individual model Nos.		
		1	2	3
Single-Package (including Space-Constrained).	Number unique to the basic model.	Package	N/A	N/A.
Single-Split System (including Space-Constrained and SDHV).	Number unique to the basic model.	Outdoor Unit	Indoor Unit	Air Mover (could be same as indoor unit if fan is part of indoor unit model number).
Multi-Split, Multi-Circuit, and Multi-Head Mini-Split System (including SDHV).	Number unique to the basic model.	Outdoor Unit	When certifying a basic model based on tested combination(s): * * * When certifying an individual combination: Indoor Unit(s).	When certifying a basic model based on tested combination(s): * * * When certifying an individual combination: Air Mover(s).
Outdoor Unit with No Match	Number unique to the basic model.	Outdoor Unit	N/A	N/A.

(4) *Additional product-specific information.* Pursuant to § 429.12(b)(13), for each individual model/combination (including outdoor units with no match and "tested combinations"), a certification report must include the following additional product-specific information: the cooling full load air volume rate for the system or for each indoor unit as applicable (in cubic feet per minute of standard air (scfm)); the air volume rates for other test conditions including minimum cooling air volume rate, intermediate cooling air volume rate, full load heating air volume rate, minimum heating air volume rate, intermediate heating air volume rate, and nominal heating air volume rate (scfm) for the system or for each indoor unit as applicable, if different from the cooling full load air volume rate; whether the individual model uses a fixed orifice, thermostatic expansion valve, electronic expansion valve, or other type of metering device; the duration of the compressor break-in period, if used; whether the optional tests were conducted to determine the C_D^c value used to represent cooling mode cycling losses or whether the default value was used; the temperature at which the crankcase heater with controls is designed to turn on, if applicable; the duration of the crankcase heater time delay for the shoulder season and heating season, if such time delay is employed; the maximum time between defrosts as allowed by the controls (in hours); whether an inlet plenum was installed during testing; the duration of the indoor fan time delay, if used; and

(i) For heat pumps, whether the optional tests were conducted to determine the C_D^c value or whether the default value was used;

(ii) For multi-split, multiple-circuit, and multi-head mini-split systems, the number of indoor units tested with the outdoor unit; the nominal cooling capacity of each indoor unit and outdoor unit in the combination; and the indoor units that are not providing heating or cooling for part-load tests;

(iii) For ducted systems having multiple indoor fans within a single indoor unit, the number of indoor fans; the nominal cooling capacity of the indoor unit and outdoor unit; which fan(s) operate to attain the full-load air volume rate when controls limit the simultaneous operation of all fans within the single indoor unit; and the allocation of the full-load air volume rate to each operational fan when different capacity blowers are connected to the common duct;

(iv) For blower coil systems, the airflow-control settings associated with full load cooling operation; and the airflow-control settings or alternative instructions for setting fan speed to the speed upon which the rating is based;

(v) For models with time-adaptive defrost control, the frosting interval to be used during Frost Accumulation tests and the procedure for manually initiating the defrost at the specified time;

(vi) For models of indoor units designed for both horizontal and vertical installation or for both up-flow and down-flow vertical installations, the orientation used for testing;

(vii) For variable speed models, the compressor frequency set points, and the required dip switch/control settings for step or variable components; and

(viii) For variable speed heat pumps, whether the optional $H4_2$ low temperature test was used to characterize performance at temperatures below 17 °F, whether the $H1_N$ or $H1_2$ test speed is the same as the $H3_2$ test speed, and whether the alternative test required for minimum-speed-limiting variable-speed heat pumps was used;

(ix) For models of outdoor units with no match, the following characteristics of the indoor coil: the face area, the coil depth in the direction of airflow, the fin density (fins per inch), the fin material, the fin style, the tube diameter, the tube material, and the numbers of tubes high and deep;

(x) For single-split-system coil-only ratings, NGIFS and the OFF-cycle time delay for the indoor fan, if used for certification testing; and

(xi) For central air conditioners and heat pumps that have two-capacity compressors that lock out low capacity operation for cooling at higher outdoor temperatures and/or heating at lower outdoor temperatures, the outdoor temperature(s) at which the unit locks out low capacity operation.

(f) *Represented values for the Federal Trade Commission.* Use the following represented value determinations to meet the requirements of the Federal Trade Commission.

(1) *Annual Operating Cost—Cooling.* Determine the represented value of estimated annual operating cost for cooling-only units or the cooling portion

of the estimated annual operating cost for air-source heat pumps that provide both heating and cooling by calculating the product of:

(i) The value determined in paragraph (A) if using appendix M to subpart B of part 430 or the value determined in paragraph (B) if using appendix M1 to subpart B of part 430;

(A) the quotient of the represented value of cooling capacity, in Btu's per hour as determined in paragraph (b)(3)(i)(C) of this section, divided by the represented value of SEER, in Btu's per watt-hour, as determined in paragraph (b)(3)(i)(B) of this section;

(B) the quotient of the represented value of cooling capacity, in Btu's per hour as determined in paragraph (b)(3)(i)(C) of this section, and multiplied by 0.93 for variable-speed heat pumps only, divided by the represented value of SEER, in Btu's per watt-hour, as determined in paragraph (b)(3)(i)(B) of this section.

(ii) The representative average use cycle for cooling of 1,000 hours per year;

(iii) A conversion factor of 0.001 kilowatt per watt; and

(iv) The representative average unit cost of electricity in dollars per kilowatt-hour as provided pursuant to section 323(b)(2) of the Act.

(2) *Annual Operating Cost—Heating.* Determine the represented value of estimated annual operating cost for air-source heat pumps that provide only heating or for the heating portion of the estimated annual operating cost for air-source heat pumps that provide both heating and cooling, as follows:

(i) When using appendix M to subpart B of part 430, the product of:

(A) The quotient of the mean of the standardized design heating requirement for the sample, in Btu's per hour, nearest to the Region IV minimum design heating requirement, determined for each unit in the sample in section 4.2 of appendix M to subpart B of part 430, divided by the represented value of heating seasonal performance factor (HSPF), in Btu's per watt-hour, calculated for Region IV corresponding to the above-mentioned standardized design heating requirement, as determined in paragraph (b)(3)(i)(B) of this section;

(B) The representative average use cycle for heating of 2,080 hours per year;

(C) The adjustment factor of 0.77, which serves to adjust the calculated design heating requirement and heating load hours to the actual load experienced by a heating system;

(D) A conversion factor of 0.001 kilowatt per watt; and

(E) The representative average unit cost of electricity in dollars per kilowatt-hour as provided pursuant to section 323(b)(2) of the Act;

(ii) When using appendix M1 to subpart B of part 430, the product of:

(A) The quotient of the represented value of cooling capacity (for air-source heat pumps that provide both cooling and heating) in Btu's per hour, as determined in paragraph (b)(3)(i)(C) of this section, or the represented value of heating capacity (for air-source heat pumps that provide only heating), as determined in paragraph (b)(3)(i)(D) of this section, divided by the represented value of heating seasonal performance factor (HSPF), in Btu's per watt-hour, calculated for Region IV, as determined in paragraph (b)(3)(i)(B) of this section;

(B) The representative average use cycle for heating of 1,572 hours per year;

(C) The adjustment factor of 1.15 (for heat pumps that are not variable-speed) or 1.07 (for heat pumps that are variable-speed), which serves to adjust the calculated design heating requirement and heating load hours to the actual load experienced by a heating system;

(D) A conversion factor of 0.001 kilowatt per watt; and

(E) The representative average unit cost of electricity in dollars per kilowatt-hour as provided pursuant to section 323(b)(2) of the Act;

* * * * *

(4) *Regional Annual Operating Cost—Cooling.* Determine the represented value of estimated regional annual operating cost for cooling-only units or the cooling portion of the estimated regional annual operating cost for air-source heat pumps that provide both heating and cooling by calculating the product of:

(i) The value determined in paragraph (A) if using appendix M to subpart B of part 430 or the value determined in paragraph (B) if using appendix M1 to subpart B of part 430;

(A) the quotient of the represented value of cooling capacity, in Btu's per hour as determined in paragraph (b)(3)(i)(C) of this section, divided by the represented value of SEER, in Btu's per watt-hour, as determined in paragraph (b)(3)(i)(B) of this section;

(B) the quotient of the represented value of cooling capacity, in Btu's per hour as determined in paragraph (b)(3)(i)(C) of this section, and multiplied by 0.93 for variable-speed heat pumps only, divided by the represented value of SEER, in Btu's per watt-hour, as determined in paragraph (b)(3)(i)(B) of this section;

(ii) The value determined in paragraph (A) if using appendix M to subpart B of part 430 or the value determined in paragraph (B) if using appendix M1 to subpart B of part 430;

(A) the estimated number of regional cooling load hours per year determined from Table 21 in section 4.4 of appendix M to subpart B of part 430;

(B) the estimated number of regional cooling load hours per year determined from Table 20 in section 4.4 of appendix M1 to subpart B of part 430;

(iii) A conversion factor of 0.001 kilowatts per watt; and

(iv) The representative average unit cost of electricity in dollars per kilowatt-hour as provided pursuant to section 323(b)(2) of the Act.

(5) *Regional Annual Operating Cost—Heating.* Determine the represented value of estimated regional annual operating cost for air-source heat pumps that provide only heating or for the heating portion of the estimated regional annual operating cost for air-source heat pumps that provide both heating and cooling as follows:

(i) When using appendix M to subpart B of part 430, the product of:

(A) The estimated number of regional heating load hours per year determined from Table 21 in section 4.4 of appendix M to subpart B of part 430;

(B) The quotient of the mean of the standardized design heating requirement for the sample, in Btu's per hour, for the appropriate generalized climatic region of interest (*i.e.*, corresponding to the regional heating load hours from "A") and determined for each unit in the sample in section 4.2 of appendix M to subpart B of part 430, divided by the represented value of HSPF, in Btu's per watt-hour, calculated for the appropriate generalized climatic region of interest and corresponding to the above-mentioned standardized design heating requirement, and determined in paragraph (b)(3)(i)(B);

(C) The adjustment factor of 0.77; which serves to adjust the calculated design heating requirement and heating load hours to the actual load experienced by a heating system;

(D) A conversion factor of 0.001 kilowatts per watt; and

(E) The representative average unit cost of electricity in dollars per kilowatt-hour as provided pursuant to section 323(b)(2) of the Act.

(ii) When using appendix M1 to subpart B of part 430, the product of:

(A) The estimated number of regional heating load hours per year determined from Table 20 in section 4.4 of appendix M1 to subpart B of part 430;

(B) The quotient of the represented value of cooling capacity (for air-source heat pumps that provide both cooling and heating) in Btu's per hour, as determined in paragraph (b)(3)(i)(C) of this section, or the represented value of heating capacity (for air- source heat pumps that provide only heating), as determined in paragraph (b)(3)(i)(D) of this section, divided by the represented value of HSPF, in Btu's per watt-hour, calculated for the appropriate generalized climatic region of interest, and determined in paragraph (b)(3)(i)(B) of this section;

(C) The adjustment factor of 1.15 (for heat pumps that are not variable-speed) or 1.07 (for heat pumps that are variable-speed), which serves to adjust the calculated design heating requirement and heating load hours to the actual load experienced by a heating system;

(D) A conversion factor of 0.001 kilowatts per watt; and

(E) The representative average unit cost of electricity in dollars per kilowatt-hour as provided pursuant to section 323(b)(2) of the Act.

* * * * *

■ 4. Section 429.70 is amended by revising paragraph (e)(2)(i) and the introductory text of paragraph (e)(5)(iv) to read as follows:

§ 429.70 Alternative methods for determining energy efficiency or energy use.

* * * * *

(e) * * *

(2) * * *

(i) Conduct minimum testing and compare to AEDM output as described in paragraphs (A) and (B) respectively.

(A) *Minimum testing.* (*1*) For non-space constrained single-split system air conditioners and heat pumps rated based on testing in accordance with appendix M to subpart B of part 430, the manufacturer must test each basic model as required under § 429.16(b)(2). Until July 1, 2024, for non-space constrained single-split-system air conditioners and heat pumps rated based on testing in accordance with appendix M1 to subpart B of part 430, the manufacturer must test a single-unit sample from 20 percent of the basic models distributed in commerce to validate the AEDM. On or after July 1, 2024, for non-space constrained single-split-system air conditioners and heat pumps rated based on testing in accordance with appendix M1 to subpart B of part 430, the manufacturer must complete testing of each basic model as required under § 429.16(b)(2).

(*2*) For other than non-space constrained single-split-system air conditioners and heat pumps, the manufacturer must test each basic model as required under § 429.16(b)(2).

(B) Using the AEDM, calculate the energy use or efficiency for each of the tested individual models/combinations within each basic model. Compare the represented value based on testing and the AEDM energy use or efficiency output according to paragraph (e)(2)(ii) of this section. The manufacturer is responsible for ensuring the accuracy and reliability of the AEDM and that their representations are appropriate and the models being distributed in commerce meet the applicable standards, regardless of the amount of testing required in paragraphs (e)(2)(i)(A) and (e)(2)(i)(B) of this section.

* * * * *

(5) * * *

(iv) *Failure to meet certified value.* If an individual model/combination tests worse than its certified value (*i.e.,* lower than the certified efficiency value or higher than the certified consumption value) by more than 5 percent, or the test results in cooling capacity that is greater than 105 percent of its certified cooling capacity, DOE will notify the manufacturer. DOE will provide the manufacturer with all documentation related to the test set up, test conditions, and test results for the unit. Within the timeframe allotted by DOE, the manufacturer:

* * * * *

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■ 5. The authority citation for part 430 continues to read as follows:

Authority: 42 U.S.C. 6291–6309; 28 U.S.C. 2461 note.

§ 430.3 [Amended]

■ 6. Section 430.3 is amended by removing, in paragraphs (b)(2), (c)(1), (c)(3), (g)(2), (g)(4), (g)(7), (g)(8), (g)(9), (g)(10) and (g)(13), "appendix M" and adding in its place, "appendices M and M1".

■ 7. Section 430.23 is amended by revising paragraph (m) to read as follows:

§ 430.23 Test procedures for the measurement of energy and water consumption.

* * * * *

(m) *Central air conditioners and heat pumps.* See the note at the beginning of appendix M and M1 to determine the appropriate test method. Determine all values discussed in this section using a single appendix.

(1) Determine cooling capacity from the steady-state wet-coil test (A or A2 Test), as described in section 3.2 of appendix M or M1 to this subpart, and rounded off to the nearest

(i) To the nearest 50 Btu/h if cooling capacity is less than 20,000 Btu/h;

(ii) To the nearest 100 Btu/h if cooling capacity is greater than or equal to 20,000 Btu/h but less than 38,000 Btu/h; and

(iii) To the nearest 250 Btu/h if cooling capacity is greater than or equal to 38,000 Btu/h and less than 65,000 Btu/h.

(2) Determine seasonal energy efficiency ratio (SEER) as described in section 4.1 of appendix M or M1 to this subpart, and round off to the nearest 0.025 Btu/W-h.

(3) Determine EER as described in section 4.7 of appendix M or M1 to this subpart, and round off to the nearest 0.025 Btu/W-h.

(4) Determine heating seasonal performance factors (HSPF) as described in section 4.2 of appendix M or M1 to this subpart, and round off to the nearest 0.025 Btu/W-h.

(5) Determine average off mode power consumption as described in section 4.3 of appendix M or M1 to this subpart, and round off to the nearest 0.5 W.

(6) Determine all other measures of energy efficiency or consumption or other useful measures of performance using appendix M or M1 of this subpart.

* * * * *

■ 8. Appendix M to subpart B of part 430 is amended by:

■ a. Revising the definition of "service coil" in Section 1.2., Definitions;

■ b. Revising paragraph c. and adding paragraphs g. and h. in Section 2.2, Test Unit Installation Requirements;

■ c. Revising paragraph a. in section 2.2.3;

■ d. Removing in, Section 2.10.1, paragraph (c) first sentence, the word "preliminary" and adding in its place the word "non-ducted";

■ e. Revising section 3.1.7;

■ f. Revising the introductory paragraph of section 3.5.1;

■ g. Revising section 3.6.4;

■ h. Revising section 3.11.1;

■ i. Revising section 3.11.1.1;

■ j. Revising section 3.11.1.2;

■ l. Revising paragraphs b., and d., in section 3.13.2;

■ m. Revising the last paragraph in section 4.1.3;

■ n. Revising section 4.1.4.2;

■ o. Revising paragraph b., in section 4.2;

■ p. Redesignating paragraph c. as paragraph d. in section 4.2 and adding paragraph c., respectively;

■ q. Revising the first paragraph in section 4.2.3;

■ r. Revising the second paragraph in section 4.2.4; and

■ s. Revising section 4.2.4.2.

The additions and revisions read as follows:

Appendix M to Subpart B of Part 430—Uniform Test Method for Measuring the Energy Consumption of Central Air Conditioners and Heat Pumps

* * * * *

1.2 Definitions

* * * * *

Service coil means an arrangement of refrigerant-to-air heat transfer coil(s), condensate drain pan, sheet metal or plastic parts to direct/route airflow over the coil(s), which may or may not include external cabinetry and/or a cooling mode expansion device, distributed in commerce solely for replacing an uncased coil or cased coil that has already been placed into service, and that has been labeled "for indoor coil replacement only" on the nameplate and in manufacturer technical and product literature. The model number for any service coil must include some mechanism (*e.g.*, an additional letter or number) for differentiating a service coil from a coil intended for an indoor unit.

* * * * *

2.2 Test Unit Installation Requirements.

* * * * *

c. Testing a ducted unit without having an indoor air filter installed is permissible as long as the minimum external static pressure requirement is adjusted as stated in Table 3, note 3 (see section 3.1.4 of this appendix). Except as noted in section 3.1.10 of this appendix, prevent the indoor air supplementary heating coils from operating during all tests. For uncased coils, create an enclosure using 1 inch fiberglass foil-faced ductboard having a nominal density of 6 pounds per cubic foot. Or alternatively, construct an enclosure using sheet metal or a similar material and insulating material having a thermal resistance ("R" value) between 4 and 6 hr·ft^2·°F/Btu. Size the enclosure and seal between the coil and/or drainage pan and the interior of the enclosure as specified in installation instructions shipped with the unit. Also seal between the plenum and inlet and outlet ducts.

* * * * *

g. If pressure measurement devices are connected to refrigerant lines at locations where the refrigerant state changes from liquid to vapor for different parts of the test (*e.g.* heating mode vs. cooling mode, on-cycle vs. off-cycle during cyclic test), the total internal volume of the pressure measurement system (transducers, gauges, connections, and lines) must be no more than 0.25 cubic inches per 12,000 Btu/h certified cooling capacity. Calculate total system internal volume using internal volume reported for pressure transducers and gauges in product literature, if available. If such information is not available, use the value of 0.1 cubic inches internal volume for each pressure transducer, and 0.2 cubic inches for each pressure gauge.

h. For single-split-system coil-only air conditioners, test using an indoor coil that has a normalized gross indoor fin surface (NGIFS) no greater than 2.0 square inches per British thermal unit per hour (sq. in./Btu/hr). NGIFS is calculated as follows:

$$NGIFS = 2 \times L_f \times W_f \times N_f \div \dot{Q}_c(95)$$

Where:

L_f = Indoor coil fin length in inches, also height of the coil transverse to the tubes.

W_f = Indoor coil fin width in inches, also depth of the coil.

N_f = Number of fins.

$\dot{Q}_c$ = the measured space cooling capacity of the tested outdoor unit/indoor unit combination as determined from the A2 or A Test whichever applies, Btu/h.

* * * * *

2.2.3 Special Requirements for Multi-Split Air Conditioners and Heat Pumps and Ducted Systems Using a Single Indoor Section Containing Multiple Indoor Blowers That Would Normally Operate Using Two or More Indoor Thermostats.

* * * * *

a. Additional requirements for multi-split air conditioners and heat pumps. For any test where the system is operated at part load (*i.e.*, one or more compressors "off", operating at the intermediate or minimum compressor speed, or at low compressor capacity), record the indoor coil(s) that are not providing heating or cooling during the test. For variable-speed systems, the manufacturer must designate in the certification report at least one indoor unit that is not providing heating or cooling for all tests conducted at minimum compressor speed.

* * * * *

3.1 * * *

* * * * *

3.1.7 Test Sequence

Before making test measurements used to calculate performance, operate the equipment for a "break-in" period, which may not exceed 20 hours. Each compressor of the unit must undergo this "break-in" period. Record the duration of the break-in period. When testing a ducted unit (except if a heating-only heat pump), conduct the A or A2 Test first to establish the cooling full-load air volume rate. * * *

* * * * *

3.5.1 Procedures When Testing Ducted Systems

The automatic controls that are normally installed with the test unit must govern the OFF/ON cycling of the air moving equipment on the indoor side (exhaust fan of the airflow measuring apparatus and the indoor blower of the test unit). For ducted coil-only systems rated based on using a fan time-delay relay, control the indoor coil airflow according to the OFF delay listed by the manufacturer in the certification report. For ducted units having a variable-speed indoor blower that has been disabled (and possibly removed), start and stop the indoor airflow at the same instances as if the fan were enabled. * * *

* * * * *

3.6.4 Tests for a Heat Pump Having a Variable-Speed Compressor

a. Conduct one maximum temperature test ($H0_1$), two high temperature tests ($H1_N$ and $H1_1$), one frost accumulation test ($H2_V$), and one low temperature test ($H3_2$). Conducting one or both of the following tests is optional: An additional high temperature test ($H1_2$) and an additional frost accumulation test ($H2_2$). Conduct the optional maximum temperature cyclic ($H0C_1$) test to determine the heating mode cyclic-degradation coefficient, C_D^h. If this optional test is conducted but yields a tested C_D^h that exceeds the default C_D^h or if the optional test is not conducted, assign C_D^h the default value of 0.25. Test conditions for the eight tests are specified in Table 13. The compressor shall operate at the same heating full speed, measured by RPM or power input frequency (Hz), equal to the maximum speed at which the system controls would operate the compressor in normal operation in 17 °F ambient temperature, for the $H1_2$, $H2_2$ and $H3_2$ tests. For a cooling/heating heat pump, the compressor shall operate for the $H1_N$ test at a speed, measured by RPM or power input frequency (Hz), no lower than the speed used in the A_2 test. The compressor shall operate at the same heating minimum speed, measured by RPM or power input frequency (Hz), for the $H0_1$, $H1C_1$, and $H1_1$ Tests. Determine the heating intermediate compressor speed cited in Table 13 using the heating mode full and minimum compressors speeds and:

$$\text{Heating intermediate speed} = \text{Heating minimum speed} + \frac{\text{Heating full speed} - \text{Heating minimum speed}}{3}$$

Where a tolerance of plus 5 percent or the next higher inverter frequency step from that calculated is allowed.

b. If the $H1_2$ test is conducted, set the 47 °F capacity and power input values used for calculation of HSPF equal to the measured values for that test:

$$\dot{Q}_{hcalc}^{k=2}(47) = \dot{Q}_h^{k=2}(47); \ \dot{E}_{hcalc}^{k=2}(47) = \dot{E}_h^{k=2}(47)$$

Where:

$\dot{Q}_{hcalc}^{k=2}(47)$ and $\dot{E}_{hcalc}^{k=2}(47)$ are the capacity and power input representing full-speed operation at 47 °F for the HSPF calculations,
$\dot{Q}_{h}^{k=2}(47)$ is the capacity measured in the $H1_2$ test, and
$\dot{E}_{h}^{k=2}(47)$ is the power input measured in the $H1_2$ test.

Evaluate the quantities $\dot{\mathrm{Q}}_{\mathrm{h}}^{\mathrm{k=2}}(47)$ and from $\dot{\mathrm{E}}_{\mathrm{h}}^{\mathrm{k=2}}(47)$ according to section 3.7.

Otherwise, if the $H1_N$ test is conducted using the same compressor speed (RPM or power input frequency) as the $H3_2$ test, set the 47 °F capacity and power input values used for calculation of HSPF equal to the measured values for that test:

$$\dot{Q}_{hcalc}^{k=2}(47) = \dot{Q}_{h}^{k=N}(47);\ \dot{E}_{hcalc}^{k=2}(47) = \dot{E}_{h}^{k=N}(47)$$

Where:

$\dot{Q}_{hcalc}^{k=2}(47)$ and $\dot{E}_{hcalc}^{k=2}(47)$ are the capacity and power input representing full-speed operation at 47 °F for the HSPF calculations,
$\dot{Q}_{h}^{k=N}(47)$ is the capacity measured in the $H1_N$ test, and
$\dot{E}_{h}^{k=N}(47)$ is the power input measured in the $H1_N$ test.

Evaluate the quantities $\dot{Q}_{h}^{\mathrm{k=N}}(47)$ and from $\dot{E}_{h}^{\mathrm{k=N}}(47)$ according to section 3.7.

Otherwise (if no high temperature test is conducted using the same speed (RPM or power input frequency) as the $H3_2$ test), calculate the 47 °F capacity and power input values used for calculation of HSPF as follows:

$$\dot{Q}_{hcalc}^{k=2}(47) = \dot{Q}_{h}^{k=2}(17) * (1 + 30\ °F * CSF);$$
$$\dot{E}_{hcalc}^{k=2}(47) = \dot{E}_{h}^{k=2}(17) * (1 + 30\ °F * PSF)$$

Where:

$\dot{Q}_{hcalc}^{k=2}(47)$ and $\dot{E}_{hcalc}^{k=2}(47)$ are the capacity and power input representing full-speed operation at 47 °F for the HSPF calculations,
$\dot{Q}_{h}^{k=2}(17)$ is the capacity measured in the $H3_2$ test,
$\dot{E}_{h}^{k=2}(17)$ is the power input measured in the $H3_2$ test,
CSF is the capacity slope factor, equal to 0.0204/°F for split systems and 0.0262/°F for single-package systems, and
PSF is the Power Slope Factor, equal to 0.00455/°F.

c. If the $H2_2$ test is not done, use the following equations to approximate the capacity and electrical power at the $H2_2$ test conditions:

$$\dot{Q}_{h}^{k=2}(35) = 0.90 * \{\dot{Q}_{h}^{k=2}(17) + 0.6 * [\dot{Q}_{hcalc}^{k=2}(47) - \dot{Q}_{h}^{k=2}(17)]\}$$
$$\dot{E}_{h}^{k=2}(35) = 0.985 * \{\dot{E}_{h}^{k=2}(17) + 0.6 * [\dot{E}_{hcalc}^{k=2}(47) - \dot{E}_{h}^{k=2}(17)]\}$$

Where:

$\dot{Q}_{hcalc}^{k=2}(47)$ and $\dot{E}_{hcalc}^{k=2}(47)$ are the capacity and power input representing full-speed operation at 47 °F for the HSPF calculations, calculated as described in section b above.
$\dot{Q}_{h}^{k=2}(17)$ and $\dot{E}_{h}^{k=2}(17)$ are the capacity and power input measured in the $H3_2$ test.

d. Determine the quantities $\dot{\mathrm{Q}}_{\mathrm{h}}^{\mathrm{k=2}}(17)$ and $\dot{\mathrm{E}}_{\mathrm{h}}^{\mathrm{k=2}}(17)$ from the $H3_2$ test, determine the quantities $\dot{\mathrm{Q}}_{\mathrm{h}}^{\mathrm{k=2}}(5)$ and $\dot{\mathrm{E}}_{\mathrm{h}}^{\mathrm{k=2}}(5)$ and $\dot{\mathrm{E}}_{\mathrm{h}}^{\mathrm{k=2}}(5)$ from the $H4_2$ test, and evaluate all four according to section 3.10.

TABLE 13—HEATING MODE TEST CONDITIONS FOR UNITS HAVING A VARIABLE-SPEED COMPRESSOR

Test description	Air entering indoor unit temperature (°F)		Air entering outdoor unit temperature (°F)		Compressor speed	Heating air volume rate
	Dry bulb	Wet bulb	Dry bulb	Wet bulb		
$H0_1$ test (required, steady)	70	$60^{(max)}$	62	56.5	Heating Minimum	Heating Minimum.[1]
$H1_2$ test (optional, steady)	70	$60^{(max)}$	47	43	Heating Full[4]	Heating Full-Load.[3]
$H1_1$ test (required, steady)	70	$60^{(max)}$	47	43	Heating Minimum	Heating Minimum.[1]
$H1_N$ test (required, steady)	70	$60^{(max)}$	47	43	Heating Full	Heating Full-Load.[3]
$H1C_1$ test (optional, cyclic)	70	$60^{(max)}$	47	43	Heating Minimum	([2])
$H2_2$ test (optional)	70	$60^{(max)}$	35	33	Heating Full[4]	Heating Full-Load.[3]
$H2_V$ test (required)	70	$60^{(max)}$	35	33	Heating Intermediate	Heating Intermediate.[5]
$H3_2$ test (required, steady)	70	$60^{(max)}$	17	15	Heating Full[4]	Heating Full-Load.[3]

[1] Defined in section 3.1.4.5 of this appendix.

[2] Maintain the airflow nozzle(s) static pressure difference or velocity pressure during an ON period at the same pressure or velocity as measured during the $H1_1$ test.

[3] Defined in section 3.1.4.4 of this appendix.

[4] Maximum speed that the system controls would operate the compressor in normal operation in 17 °F ambient temperature. The $H1_2$ test is not needed if the $H1_N$ test uses this same compressor speed.

[5] Defined in section 3.1.4.6 of this appendix.

* * * * *

3.11.1 If Using the Outdoor Air Enthalpy Method as the Secondary Test Method

a. For all cooling mode and heating mode tests, first conduct a test without the outdoor air-side test apparatus described in section 2.10.1 of this appendix connected to the outdoor unit (“non-ducted” test).

b. For the first section 3.2 steady-state cooling mode test and the first section 3.6 steady-state heating mode test, conduct a second test in which the outdoor-side apparatus is connected (“ducted” test). No other cooling mode or heating mode tests require the ducted test so long as the unit operates the outdoor fan during all cooling mode steady-state tests at the same speed and all heating mode steady-state tests at the same speed. If using more than one outdoor fan speed for the cooling mode steady-state tests, however, conduct the ducted test for each cooling mode test where a different fan speed is first used. This same requirement applies for the heating mode tests.

* * * * *

3.11.1.1 Non-Ducted Test

a. For the non-ducted test, connect the indoor air-side test apparatus to the indoor coil; do not connect the outdoor air-side test apparatus. Allow the test room reconditioning apparatus and the unit being tested to operate for at least one hour. After attaining equilibrium conditions, measure the following quantities at equal intervals that span 5 minutes or less:

(1) The section 2.10.1 evaporator and condenser temperatures or pressures;

(2) Parameters required according to the indoor air enthalpy method.

Continue these measurements until a 30-minute period (*e.g.*, seven consecutive 5-minute samples) is obtained where the Table 8 or Table 15, whichever applies, test tolerances are satisfied.

b. For cases where a ducted test is not required per section 3.11.1.b of this appendix, the non-ducted test constitutes the “official” test for which validity is not based on comparison with a secondary test.

c. For cases where a ducted test is required per section 3.11.1.b of this appendix, the following conditions must be met for the non-ducted test to constitute a valid “official” test:

(1) The energy balance specified in section 3.1.1 of this appendix is achieved for the ducted test (*i.e.*, compare the capacities determined using the indoor air enthalpy method and the outdoor air enthalpy method).

(2) The capacities determined using the indoor air enthalpy method from the ducted and non-ducted tests must agree within 2.0 percent.

3.11.1.2 Ducted Test

a. The test conditions and tolerances for the ducted test are the same as specified for the official test.

b. After collecting 30 minutes of steady-state data during the non-ducted test, connect the outdoor air-side test apparatus to the unit for the ducted test. Adjust the exhaust fan of the outdoor airflow measuring apparatus until averages for the evaporator and condenser temperatures, or the saturated temperatures corresponding to the measured pressures, agree within ±0.5 °F of the averages achieved during the non-ducted test. Calculate the averages for the ducted test using five or more consecutive readings taken at one minute intervals. Make these consecutive readings after re-establishing equilibrium conditions.

c. During the ducted test, at one minute intervals, measure the parameters required according to the indoor air enthalpy method and the outdoor air enthalpy method.

d. For cooling mode ducted tests, calculate capacity based on outdoor air-enthalpy measurements as specified in sections 7.3.3.2 and 7.3.3.3 of ASHRAE 37–2009 (incorporated by reference, see § 430.3). For heating mode ducted tests, calculate heating capacity based on outdoor air-enthalpy measurements as specified in sections 7.3.4.2 and 7.3.3.4.3 of the same ASHRAE Standard. Adjust the outdoor-side capacity according to section 7.3.3.4 of ASHRAE 37–2009 to account for line losses when testing split systems.

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3.13.2 This test determines the off mode average power rating for central air conditioners and heat pumps for which ambient temperature can affect the measurement of crankcase heater power.

* * * * *

b. Configure Controls: Position a temperature sensor to measure the outdoor dry-bulb temperature in the air between 2 and 6 inches from the crankcase heater control temperature sensor or, if no such temperature sensor exists, position it in the air between 2 and 6 inches from the crankcase heater. Utilize the temperature measurements from this sensor for this portion of the test procedure. Configure the controls of the central air conditioner or heat pump so that it operates as if connected to a building thermostat that is set to the OFF position. Use a compatible building thermostat if necessary to achieve this configuration.

Conduct the test after completion of the B, B_1, or B_2 test. Alternatively, start the test when the outdoor dry-bulb temperature is at 82 °F and the temperature of the compressor shell (or temperature of each compressor's shell if there is more than one compressor) is at least 81 °F. Then adjust the outdoor temperature and achieve an outdoor dry-bulb temperature of 72 °F. If the unit's compressor has no sound blanket, wait at least 4 hours after the outdoor temperature reaches 72 °F. Otherwise, wait at least 8 hours after the outdoor temperature reaches 72 °F. Maintain this temperature within +/-2 °F while the compressor temperature equilibrates and while making the power measurement, as described in section 3.13.2.c of this appendix.

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d. Reduce outdoor temperature: Approach the target outdoor dry-bulb temperature by adjusting the outdoor temperature. This target temperature is five degrees Fahrenheit less than the temperature certified by the manufacturer as the temperature at which the crankcase heater turns on. If the unit's compressor has no sound blanket, wait at least 4 hours after the outdoor temperature reaches the target temperature. Otherwise, wait at least 8 hours after the outdoor temperature reaches the target temperature. Maintain the target temperature within +/- 2 °F while the compressor temperature equilibrates and while making the power measurement, as described in section 3.13.2.e of this appendix.

4.1 * * *

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4.1.3 SEER Calculations for an Air Conditioner or Heat Pump Having a Two-Capacity Compressor

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The calculation of Equation 4.1–1 quantities $q_c(T_j)/N$ and $e_c(T_j)/N$ differs depending on whether the test unit would operate at low capacity (section 4.1.3.1 of this appendix), cycle between low and high capacity (section 4.1.3.2 of this appendix), or operate at high capacity (sections 4.1.3.3 and 4.1.3.4 of this appendix) in responding to the building load. For units that lock out low capacity operation at higher outdoor temperatures, the outdoor temperature at which the unit locks out must be that specified by the manufacturer in the certification report so that the appropriate equations are used. Use Equation 4.1–2 to calculate the building load, $BL(T_j)$, for each temperature bin.

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4.1.4.2 Unit operates at an intermediate compressor speed (k=i) in order to match the building cooling load at temperature T_j, $\dot{Q}_c^{k=1}(T_j) < BL(T_j) < \dot{Q}_c^{k=2}(T_j)$.

$$\frac{q_c(T_j)}{N} = \dot{Q}_c^{k=i}(T_j) * \frac{n_j}{N} \qquad \frac{e_c(T_j)}{N} = \dot{E}_c^{k=i}(T_j) * \frac{n_j}{N}$$

Where:

$\dot{Q}_c^{k=i}(T_j) = BL(T_j)$, the space cooling capacity delivered by the unit in matching the building load at temperature T_j, Btu/h.

The matching occurs with the unit operating at compressor speed k = i.

$\dot{E}_c^{k=i}(T_j) = \frac{\dot{Q}_c^{k=i}(T_j)}{EER^{k=i}(T_j)}$, the electrical power input required by the test unit when operating at a compressor speed of k = i and temperature T_j, W.

$EER^{k=i}(T_j)$, the steady-state energy efficiency ratio of the test unit when operating at a compressor speed of k = i and temperature T_j, Btu/h per W.

Obtain the fractional bin hours for the cooling season, n_j/N, from Table 18. For each temperature bin where the unit operates at an intermediate compressor speed, determine the energy efficiency ratio $EER^{k=i}(T_j)$ using the following equations,

For each temperature bin where $\dot{Q}_c^{k=1}(T_j) < BL(T_j) < \dot{Q}_c^{k=v}(T_j)$,

$$EER^{k=i}(T_j) = EER^{k=1}(T_j) + \frac{EER^{k=v}(T_j) - EER^{k=1}(T_j)}{Q^{k=v}(T_j) - Q^{k=1}(T_j)} * (BL(T_j) - Q^{k=1}(T_j))$$

For each temperature bin where $\dot{Q}_c^{K=v}(T_j) \leq BL(T_j) < \dot{Q}_c^{K=2}(T_j)$,

$$EER^{k=i}(T_j) = EER^{k=v}(T_j) + \frac{EER^{k=2}(T_j) - EER^{k=v}(T_j)}{Q^{k=2}(T_j) - Q^{k=v}(T_j)} * (BL(T_j) - Q^{k=v}(T_j))$$

Where:

$EER^{k=1}(T_j)$ is the steady-state energy efficiency ratio of the test unit when operating at minimum compressor speed and temperature Tj, Btu/h per W, calculated using capacity $\dot{Q}_c^{k=1}(T_j)$ calculated using Equation 4.1.4–1 and electrical power consumption $\dot{E}_c^{k=1}(T_j)$ calculated using Equation 4.1.4–2;

$EER^{k=v}(T_j)$ is the steady-state energy efficiency ratio of the test unit when operating at intermediate compressor speed and temperature Tj, Btu/h per W, calculated using capacity $\dot{Q}_c^{k=v}(T_j)$ calculated using Equation 4.1.4–3 and electrical power consumption $\dot{E}_c^{k=v}(T_j)$ calculated using Equation 4.1.4–4;

$EER^{k=2}(T_j)$ is the steady-state energy efficiency ratio of the test unit when operating at full compressor speed and temperature Tj, Btu/h per W, calculated using capacity $\dot{Q}_c^{k=2}(T_j)$ and electrical power consumption $\dot{E}_c^{k=2}(T_j)$, both calculated as described in section 4.1.4; and

$BL(T_j)$ is the building cooling load at temperature T_j, Btu/h.

* * * * *

4.2 * * *

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b. For a section 3.6.2 single-speed heat pump or a two-capacity heat pump not covered by item d, $\dot{Q}_h^{k}(47) = \dot{Q}_h^{k=2}(47)$, the space heating capacity determined from the H1 or $H1_2$ test.

c. For a variable-speed heat pump, $\dot{Q}_h^{k}(47) = \dot{Q}_h^{k=N}(47)$, the space heating capacity determined from the $H1_N$ test.

d. For two-capacity, northern heat pumps (see section 1.2 of this appendix, Definitions), $Q^k{}_h(47) = \dot{Q}^{k=1}{}_h(47)$, the space heating capacity determined from the $H1_1$ test.

For all heat pumps, HSPF accounts for * * *

* * * * *

4.2.3 Additional Steps for Calculating the HSPF of a Heat Pump Having a Two-Capacity Compressor

The calculation of the Equation 4.2–1 quantities differ depending upon whether the heat pump would operate at low capacity (section 4.2.3.1 of this appendix), cycle between low and high capacity (section 4.2.3.2 of this appendix), or operate at high capacity (sections 4.2.3.3 and 4.2.3.4 of this appendix) in responding to the building load. For heat pumps that lock out low capacity operation at low outdoor temperatures, the outdoor temperature at which the unit locks out must be that specified by the manufacturer in the certification report so that the appropriate equations can be selected.

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4.2.4 * * *

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Evaluate the space heating capacity, $\dot{Q}_h^{k=2}(T_j)$, and electrical power consumption, $\dot{E}_h^{k=2}(T_j)$, of the heat pump when operating at full compressor speed and outdoor temperature T_j by solving Equations 4.2.2–3 and 4.2.2–4, respectively, for k=2. For Equation 4.2.2–3, use $\dot{Q}_{hcalc}^{k=2}(47)$ to represent $\dot{Q}_h^{k=2}(47)$, and for Equation 4.2.2–4, use $\dot{E}_{hcalc}^{k=2}(47)$ to represent $\dot{E}_{hcalc}^{k=2}(47)$—evaluate $\dot{Q}_{hcalc}^{k=2}(47)$ and $\dot{E}_{hcalc}^{k=2}(47)$ as specified in section 3.6.4b of this appendix. * * *

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4.2.4.2 Heat pump operates at an intermediate compressor speed (k=i) in order to match the building heating load at a temperature T_j, $\dot{Q}_h^{k=1}(T_j) < BL(T_j) < \dot{Q}_h^{k=2}(T_j)$. Calculate

$\frac{RH(T_j)}{N}$ using Equation 4.2.3-2 while evaluating $\frac{e_h(T_j)}{N}$ using,

$$\frac{e_h(T_j)}{N} = \dot{E}_h^{k=i}(T_j) * \delta(T_j) * \frac{n_j}{N}$$

where,

$$\dot{E}_h^{k=i}(T_j) = \frac{\dot{Q}_h^{k=i}(T_j)}{3.413\frac{Btu/h}{W} * COP^{k=i}(T_j)}$$

and $\delta(T_j)$ is evaluated using Equation 4.2.3–3 while,

$\dot{Q}_h^{k=i}(T_j) = BL(T_j)$, the space heating capacity delivered by the unit in matching the building load at temperature (T_j), Btu/h. The matching occurs with the heat pump operating at compressor speed k=i.

$COP^{k=i}(T_j)$ = the steady-state coefficient of performance of the heat pump when operating at compressor speed k=i and temperature T_j, dimensionless.

For each temperature bin where the heat pump operates at an intermediate compressor speed, determine $COP^{k=i}(T_j)$ using the following equations,

For each temperature bin where $\dot{Q}_h^{k=1}(T_j) < BL(T_j) < \dot{Q}_h^{k=v}(T_j)$,

$$COP_h^{k=i}(T_j) = COP_h^{k=1}(T_j) + \frac{COP_h^{k=v}(T_j) - COP_h^{k=1}(T_j)}{Q_h^{k=v}(T_j) - Q_h^{k=1}(T_j)} * (BL(T_j) - Q_h^{k=1}(T_j))$$

For each temperature bin where $\dot{Q}_h^{k=v}(T_j) \leq BL(T_j) < \dot{Q}_h^{k=2}(T_j)$,

$$COP_h^{k=i}(T_j) = COP_h^{k=v}(T_j) + \frac{COP_h^{k=2}(T_j) - COP_h^{k=v}(T_j)}{Q_h^{k=2}(T_j) - Q_h^{k=v}(T_j)} * (BL(T_j) - Q_h^{k=v}(T_j))$$

Where:

$COP_h^{k=1}(T_j)$ is the steady-state coefficient of performance of the heat pump when operating at minimum compressor speed and temperature Tj, dimensionless, calculated using capacity $\dot{Q}_h^{k=1}(T_j)$ calculated using Equation 4.2.4–1 and electrical power consumption $\dot{E}_h^{k=1}(T_j)$ calculated using Equation 4.2.4–2;

$COP_h^{k=v}(T_j)$ is the steady-state coefficient of performance of the heat pump when operating at intermediate compressor speed and temperature Tj, dimensionless, calculated using capacity $\dot{Q}_h^{k=v}(T_j)$ calculated using Equation 4.2.4–3 and electrical power consumption $\dot{E}_h^{k=v}(T_j)$ calculated using Equation 4.2.4–4;

$COP_h^{k=2}(T_j)$ is the steady-state coefficient of performance of the heat pump when operating at full compressor speed and temperature Tj, dimensionless, calculated using capacity $\dot{Q}_h^{k=2}(T_j)$ and electrical power consumption $\dot{E}_h^{k=2}(T_j)$, both calculated as described in section 4.2.4; and

$BL(T_j)$ is the building heating load at temperature T_j, Btu/h.

■ 9. Add appendix M1 to subpart B of part 430 to read as follows:

Appendix M1 to Subpart B of Part 430—Uniform Test Method for Measuring the Energy Consumption of Central Air Conditioners and Heat Pumps

Prior to January 1, 2023, any representations, including compliance certifications, made with respect to the energy use, power, or efficiency of central air conditioners and central air conditioning heat pumps must be based on the results of testing pursuant to Appendix M of this subpart.

On or after January 1, 2023, any representations, including compliance certifications, made with respect to the energy use, power, or efficiency of central air conditioners and central air conditioning heat pumps must be based on the results of testing pursuant to this appendix.

1. Scope and Definitions

1.1 Scope

This test procedure provides a method of determining SEER, EER, HSPF and $P_{W,OFF}$ for central air conditioners and central air conditioning heat pumps including the following categories:

(a) Split-system air conditioners, including single-split, multi-head mini-split, multi-split (including VRF), and multi-circuit systems

(b) Split-system heat pumps, including single-split, multi-head mini-split, multi-split (including VRF), and multi-circuit systems

(c) Single-package air conditioners

(d) Single-package heat pumps

(e) Small-duct, high-velocity systems (including VRF)

(f) Space-constrained products—air conditioners

(g) Space-constrained products—heat pumps

For the purposes of this appendix, the Department of Energy incorporates by reference specific sections of several industry standards, as listed in § 430.3. In cases where there is a conflict, the language of the test procedure in this appendix takes precedence over the incorporated standards.

All section references refer to sections within this appendix unless otherwise stated.

1.2 Definitions

Airflow-control settings are programmed or wired control system configurations that control a fan to achieve discrete, differing ranges of airflow—often designated for performing a specific function (*e.g.*, cooling, heating, or constant circulation)—without manual adjustment other than interaction with a user-operable control (*i.e.*, a thermostat) that meets the manufacturer specifications for installed-use. For the purposes of this appendix, manufacturer specifications for installed-use are those found in the product literature shipped with the unit.

Air sampling device is an assembly consisting of a manifold with several branch tubes with multiple sampling holes that draws an air sample from a critical location from the unit under test (*e.g.* indoor air inlet, indoor air outlet, outdoor air inlet, etc.).

Airflow prevention device denotes a device that prevents airflow via natural convection by mechanical means, such as an air damper box, or by means of changes in duct height, such as an upturned duct.

Aspirating psychrometer is a piece of equipment with a monitored airflow section that draws uniform airflow through the measurement section and has probes for measurement of air temperature and humidity.

Blower coil indoor unit means an indoor unit either with an indoor blower housed with the coil or with a separate designated air mover such as a furnace or a modular blower (as defined in appendix AA to the subpart).

Blower coil system refers to a split system that includes one or more blower coil indoor units.

Cased coil means a coil-only indoor unit with external cabinetry.

Ceiling-mount blower coil system means a split-system air conditioner or heat pump for which the outdoor unit has a certified cooling capacity less than or equal to 36,000 Btu/h and the indoor unit is shipped with manufacturer-supplied installation instructions that specify to secure the indoor unit only to the ceiling of the conditioned space, with return air directly to the bottom of the unit (without ductwork), having an installed height no more than 12 inches (not including condensate drain lines) and depth (in the direction of airflow) of no more than 30 inches, with supply air discharged horizontally.

Coefficient of Performance (COP) means the ratio of the average rate of space heating delivered to the average rate of electrical energy consumed by the heat pump. Determine these rate quantities from a single test or, if derived via interpolation, determine at a single set of operating conditions. COP is a dimensionless quantity. When determined for a ducted coil-only system, COP must be calculated using the default values for heat output and power input of a fan motor specified in sections 3.7 and 3.9.1 of this appendix.

Coil-only indoor unit means an indoor unit that is distributed in commerce without an indoor blower or separate designated air mover. A coil-only indoor unit installed in the field relies on a separately-installed furnace or a modular blower for indoor air movement.

Coil-only system means a system that includes only (one or more) coil-only indoor units.

Condensing unit removes the heat absorbed by the refrigerant to transfer it to the outside environment and consists of an outdoor coil, compressor(s), and air moving device.

Constant-air-volume-rate indoor blower means a fan that varies its operating speed to provide a fixed air-volume-rate from a ducted system.

Continuously recorded, when referring to a dry bulb measurement, dry bulb temperature used for test room control, wet bulb temperature, dew point temperature, or relative humidity measurements, means that the specified value must be sampled at regular intervals that are equal to or less than 15 seconds.

Cooling load factor (CLF) means the ratio having as its numerator the total cooling delivered during a cyclic operating interval consisting of one ON period and one OFF period, and as its denominator the total cooling that would be delivered, given the same ambient conditions, had the unit operated continuously at its steady-state, space-cooling capacity for the same total time (ON + OFF) interval.

Crankcase heater means any electrically powered device or mechanism for intentionally generating heat within and/or around the compressor sump volume. Crankcase heater control may be achieved using a timer or may be based on a change in temperature or some other measurable parameter, such that the crankcase heater is not required to operate continuously. A crankcase heater without controls operates continuously when the compressor is not operating.

Cyclic Test means a test where the unit's compressor is cycled on and off for specific time intervals. A cyclic test provides half the information needed to calculate a degradation coefficient.

Damper box means a short section of duct having an air damper that meets the performance requirements of section 2.5.7 of this appendix.

Degradation coefficient (C_D) means a parameter used in calculating the part load factor. The degradation coefficient for cooling is denoted by $C_D{}^c$. The degradation coefficient for heating is denoted by $C_D{}^h$.

Demand-defrost control system means a system that defrosts the heat pump outdoor coil-only when measuring a predetermined degradation of performance. The heat pump's controls either:

(1) Monitor one or more parameters that always vary with the amount of frost accumulated on the outdoor coil (*e.g.*, coil to air differential temperature, coil differential air pressure, outdoor fan power or current, optical sensors) at least once for every ten minutes of compressor ON-time when space heating or

(2) Operate as a feedback system that measures the length of the defrost period and adjusts defrost frequency accordingly. In all cases, when the frost parameter(s) reaches a predetermined value, the system initiates a defrost. In a demand-defrost control system, defrosts are terminated based on monitoring a parameter(s) that indicates that frost has been eliminated from the coil. (Note: Systems that vary defrost intervals according to outdoor dry-bulb temperature are not demand-defrost systems.) A demand-defrost control system, which otherwise meets the requirements, may allow time-initiated defrosts if, and only if, such defrosts occur after 6 hours of compressor operating time.

Design heating requirement (DHR) predicts the space heating load of a residence when subjected to outdoor design conditions. Estimates for the minimum and maximum DHR are provided for six generalized U.S. climatic regions in section 4.2 of this appendix.

Dry-coil tests are cooling mode tests where the wet-bulb temperature of the air supplied to the indoor unit is maintained low enough that no condensate forms on the evaporator coil.

Ducted system means an air conditioner or heat pump that is designed to be permanently installed equipment and delivers conditioned air to the indoor space through a duct(s). The air conditioner or heat pump may be either a split-system or a single-package unit.

Energy efficiency ratio (EER) means the ratio of the average rate of space cooling delivered to the average rate of electrical energy consumed by the air conditioner or heat pump. Determine these rate quantities must be determined from a single test or, if derived via interpolation, determine at a single set of operating conditions. EER is expressed in units of

$$\frac{Btu/h}{W}.$$

When determined for a ducted coil-only system, EER must include, from this appendix, the section 3.3 and 3.5.1 default values for the heat output and power input of a fan motor.

Evaporator coil means an assembly that absorbs heat from an enclosed space and transfers the heat to a refrigerant.

Heat pump means a kind of central air conditioner that utilizes an indoor conditioning coil, compressor, and refrigerant-to-outdoor air heat exchanger to provide air heating, and may also provide air cooling, air dehumidifying, air humidifying, air circulating, and air cleaning.

Heat pump having a heat comfort controller means a heat pump with controls that can regulate the operation of the electric resistance elements to assure that the air temperature leaving the indoor section does not fall below a specified temperature. Heat pumps that actively regulate the rate of electric resistance heating when operating below the balance point (as the result of a second stage call from the thermostat) but do not operate to maintain a minimum delivery temperature are not considered as having a heat comfort controller.

Heating load factor (HLF) means the ratio having as its numerator the total heating delivered during a cyclic operating interval consisting of one ON period and one OFF period, and its denominator the heating capacity measured at the same test conditions used for the cyclic test, multiplied by the total time interval (ON plus OFF) of the cyclic-test.

Heating season means the months of the year that require heating, *e.g.*, typically, and roughly, October through April.

Heating seasonal performance factor (HSPF) means the total space heating required during the heating season, expressed in Btu, divided by the total electrical energy consumed by the heat pump system during the same season, expressed in watt-hours. The HSPF used to evaluate compliance with 10 CFR 430.32(c) is based on Region IV and the sampling plan stated in 10 CFR 429.16(a).

Independent coil manufacturer (ICM) means a manufacturer that manufactures indoor units but does not manufacture single-package units or outdoor units.

Indoor unit means a separate assembly of a split system that includes—

(1) An arrangement of refrigerant-to-air heat transfer coil(s) for transfer of heat between the refrigerant and the indoor air,

(2) A condensate drain pan, and may or may not include

(3) Sheet metal or plastic parts not part of external cabinetry to direct/route airflow over the coil(s),

(4) A cooling mode expansion device,

(5) External cabinetry, and

(6) An integrated indoor blower (*i.e.* a device to move air including its associated motor). A separate designated air mover that may be a furnace or a modular blower (as defined in appendix AA to the subpart) may be considered to be part of the indoor unit. A service coil is not an indoor unit.

Low-static blower coil system means a ducted multi-split or multi-head mini-split system for which all indoor units produce greater than 0.01 in. wc. and a maximum of 0.35 in. wc. external static pressure when operated at the cooling full-load air volume rate not exceeding 400 cfm per rated ton of cooling.

Mid-static blower coil system means a ducted multi-split or multi-head mini-split system for which all indoor units produce greater than 0.20 in. wc. and a maximum of 0.65 in. wc. when operated at the cooling full-load air volume rate not exceeding 400 cfm per rated ton of cooling.

Minimum-speed-limiting variable-speed heat pump means a heat pump for which the compressor speed (represented by revolutions per minute or motor power input frequency) is higher than its value for operation in a 47 °F ambient temperature for any bin temperature T_j for which the calculated heating load is less than the calculated intermediate-speed capacity.

Mobile home blower coil system means a split system that contains an outdoor unit and an indoor unit that meet the following criteria:

(1) Both the indoor and outdoor unit are shipped with manufacturer-supplied installation instructions that specify installation only in a mobile home with the home and equipment complying with HUD Manufactured Home Construction Safety Standard 24 CFR part 3280;

(2) The indoor unit cannot exceed 0.40 in. wc. when operated at the cooling full-load air volume rate not exceeding 400 cfm per rated ton of cooling; and

(3)The indoor and outdoor unit each must bear a label in at least ¼ inch font that reads "For installation only in HUD manufactured home per Construction Safety Standard 24 CFR part 3280."

Mobile home coil-only system means a coil-only split system that includes an outdoor unit and coil-only indoor unit that meet the following criteria:

(1) The outdoor unit is shipped with manufacturer-supplied installation instructions that specify installation only for mobile homes that comply with HUD Manufactured Home Construction Safety Standard 24 CFR part 3280,

(2) The coil-only indoor unit is shipped with manufacturer-supplied installation instructions that specify installation only in a mobile home furnace, modular blower, or designated air mover that complies with HUD Manufactured Home Construction Safety Standard 24 CFR part 3280, and

(3) The coil-only indoor unit and outdoor unit each has a label in at least ¼ inch font

that reads "For installation only in HUD manufactured home per Construction Safety Standard 24 CFR part 3280."

Multi-head mini-split system means a split system that has one outdoor unit and that has two or more indoor units connected with a single refrigeration circuit. The indoor units operate in unison in response to a single indoor thermostat.

Multiple-circuit (or multi-circuit) system means a split system that has one outdoor unit and that has two or more indoor units installed on two or more refrigeration circuits such that each refrigeration circuit serves a compressor and one and only one indoor unit, and refrigerant is not shared from circuit to circuit.

Multiple-split (or multi-split) system means a split system that has one outdoor unit and two or more coil-only indoor units and/or blower coil indoor units connected with a single refrigerant circuit. The indoor units operate independently and can condition multiple zones in response to at least two indoor thermostats or temperature sensors. The outdoor unit operates in response to independent operation of the indoor units based on control input of multiple indoor thermostats or temperature sensors, and/or based on refrigeration circuit sensor input (*e.g.,* suction pressure).

Nominal capacity means the capacity that is claimed by the manufacturer on the product name plate. Nominal cooling capacity is approximate to the air conditioner cooling capacity tested at A or A2 condition. Nominal heating capacity is approximate to the heat pump heating capacity tested in the $H1_N$ test.

Non-ducted indoor unit means an indoor unit that is designed to be permanently installed, mounted on room walls and/or ceilings, and that directly heats or cools air within the conditioned space.

Normalized Gross Indoor Fin Surface (NGIFS) means the gross fin surface area of the indoor unit coil divided by the cooling capacity measured for the A or A2 Test, whichever applies.

Off-mode power consumption means the power consumption when the unit is connected to its main power source but is neither providing cooling nor heating to the building it serves.

Off-mode season means, for central air conditioners other than heat pumps, the shoulder season and the entire heating season; and for heat pumps, the shoulder season only.

Outdoor unit means a separate assembly of a split system that transfers heat between the refrigerant and the outdoor air, and consists of an outdoor coil, compressor(s), an air moving device, and in addition for heat pumps, may include a heating mode expansion device, reversing valve, and/or defrost controls.

Outdoor unit manufacturer (OUM) means a manufacturer of single-package units, outdoor units, and/or both indoor units and outdoor units.

Part-load factor (PLF) means the ratio of the cyclic EER (or COP for heating) to the steady-state EER (or COP), where both EERs (or COPs) are determined based on operation at the same ambient conditions.

Seasonal energy efficiency ratio (SEER) means the total heat removed from the conditioned space during the annual cooling season, expressed in Btu's, divided by the total electrical energy consumed by the central air conditioner or heat pump during the same season, expressed in watt-hours.

Service coil means an arrangement of refrigerant-to-air heat transfer coil(s), condensate drain pan, sheet metal or plastic parts to direct/route airflow over the coil(s), which may or may not include external cabinetry and/or a cooling mode expansion device, distributed in commerce solely for replacing an uncased coil or cased coil that has already been placed into service, and that has been labeled "for indoor coil replacement only" on the nameplate and in manufacturer technical and product literature. The model number for any service coil must include some mechanism (*e.g.,* an additional letter or number) for differentiating a service coil from a coil intended for an indoor unit.

Shoulder season means the months of the year in between those months that require cooling and those months that require heating, *e.g.,* typically, and roughly, April through May, and September through October.

Single-package unit means any central air conditioner or heat pump that has all major assemblies enclosed in one cabinet.

Single-split system means a split system that has one outdoor unit and one indoor unit connected with a single refrigeration circuit.

Small-duct, high-velocity system means a split system for which all indoor units are blower coil indoor units that produce at least 1.2 inches (of water column) of external static pressure when operated at the full-load air volume rate certified by the manufacturer of at least 220 scfm per rated ton of cooling.

Split system means any central air conditioner or heat pump that has at least two separate assemblies that are connected with refrigerant piping when installed. One of these assemblies includes an indoor coil that exchanges heat with the indoor air to provide heating or cooling, while one of the others includes an outdoor coil that exchanges heat with the outdoor air. Split systems may be either blower coil systems or coil-only systems.

Standard Air means dry air having a mass density of 0.075 lb/ft^3.

Steady-state test means a test where the test conditions are regulated to remain as constant as possible while the unit operates continuously in the same mode.

Temperature bin means the 5 °F increments that are used to partition the outdoor dry-bulb temperature ranges of the cooling ($\geq$65 °F) and heating ($<$65 °F) seasons.

Test condition tolerance means the maximum permissible difference between the average value of the measured test parameter and the specified test condition.

Test operating tolerance means the maximum permissible range that a measurement may vary over the specified test interval. The difference between the maximum and minimum sampled values must be less than or equal to the specified test operating tolerance.

Tested combination means a multi-head mini-split, multi-split, or multi-circuit system having the following features:

(1) The system consists of one outdoor unit with one or more compressors matched with between two and five indoor units;

(2) The indoor units must:

(i) Collectively, have a nominal cooling capacity greater than or equal to 95 percent and less than or equal to 105 percent of the nominal cooling capacity of the outdoor unit;

(ii) Each represent the highest sales volume model family, if this is possible while meeting all the requirements of this section. If this is not possible, one or more of the indoor units may represent another indoor model family in order that all the other requirements of this section are met.

(iii) Individually not have a nominal cooling capacity greater than 50 percent of the nominal cooling capacity of the outdoor unit, unless the nominal cooling capacity of the outdoor unit is 24,000 Btu/h or less;

(iv) Operate at fan speeds consistent with manufacturer's specifications; and

(v) All be subject to the same minimum external static pressure requirement while able to produce the same external static pressure at the exit of each outlet plenum when connected in a manifold configuration as required by the test procedure.

(3) Where referenced, "nominal cooling capacity" means, for indoor units, the highest cooling capacity listed in published product literature for 95 °F outdoor dry bulb temperature and 80 °F dry bulb, 67 °F wet bulb indoor conditions, and for outdoor units, the lowest cooling capacity listed in published product literature for these conditions. If incomplete or no operating conditions are published, use the highest (for indoor units) or lowest (for outdoor units) such cooling capacity available for sale.

Time-adaptive defrost control system is a demand-defrost control system that measures the length of the prior defrost period(s) and uses that information to automatically determine when to initiate the next defrost cycle.

Time-temperature defrost control systems initiate or evaluate initiating a defrost cycle only when a predetermined cumulative compressor ON-time is obtained. This predetermined ON-time is generally a fixed value (*e.g.,* 30, 45, 90 minutes) although it may vary based on the measured outdoor dry-bulb temperature. The ON-time counter accumulates if controller measurements (*e.g.,* outdoor temperature, evaporator temperature) indicate that frost formation conditions are present, and it is reset/remains at zero at all other times. In one application of the control scheme, a defrost is initiated whenever the counter time equals the predetermined ON-time. The counter is reset when the defrost cycle is completed.

In a second application of the control scheme, one or more parameters are measured (*e.g.,* air and/or refrigerant temperatures) at the predetermined, cumulative, compressor ON-time. A defrost is initiated only if the measured parameter(s) falls within a predetermined range. The ON-time counter is reset regardless of whether or not a defrost is initiated. If systems of this second type use cumulative ON-time intervals of 10 minutes or less, then the heat pump may qualify as having a demand defrost control system (see definition).

Triple-capacity, northern heat pump means a heat pump that provides two stages of cooling and three stages of heating. The two common stages for both the cooling and heating modes are the low capacity stage and the high capacity stage. The additional heating mode stage is the booster capacity stage, which offers the highest heating capacity output for a given set of ambient operating conditions.

Triple-split system means a split system that is composed of three separate assemblies: An outdoor fan coil section, a blower coil indoor unit, and an indoor compressor section.

Two-capacity (or two-stage) compressor system means a central air conditioner or heat pump that has a compressor or a group of compressors operating with only two stages of capacity. For such systems, low capacity means the compressor(s) operating at low stage, or at low load test conditions. The low compressor stage that operates for heating mode tests may be the same or different from the low compressor stage that operates for cooling mode tests. For such systems, high capacity means the compressor(s) operating at high stage, or at full load test conditions.

Two-capacity, northern heat pump means a heat pump that has a factory or field-selectable lock-out feature to prevent space cooling at high-capacity. Two-capacity heat pumps having this feature will typically have two sets of ratings, one with the feature disabled and one with the feature enabled. The heat pump is a two-capacity northern heat pump only when this feature is enabled at all times. The certified indoor coil model number must reflect whether the ratings pertain to the lockout enabled option via the inclusion of an extra identifier, such as "+LO". When testing as a two-capacity, northern heat pump, the lockout feature must remain enabled for all tests.

Uncased coil means a coil-only indoor unit without external cabinetry.

Variable refrigerant flow (VRF) system means a multi-split system with at least three compressor capacity stages, distributing refrigerant through a piping network to multiple indoor blower coil units each capable of individual zone temperature control, through proprietary zone temperature control devices and a common communications network. Note: Single-phase VRF systems less than 65,000 Btu/h are central air conditioners and central air conditioning heat pumps.

Variable-speed compressor system means a central air conditioner or heat pump that has a compressor that uses a variable-speed drive to vary the compressor speed to achieve variable capacities.

Wall-mount blower coil system means a split-system air conditioner or heat pump for which the outdoor unit has a certified cooling capacity less than or equal to 36,000 Btu/h and the indoor unit is shipped with manufacturer-supplied installation instructions that specify to secure the back side of the unit only to a wall within the conditioned space, with the capability of front air return (without ductwork) and not capable of horizontal airflow, having a height no more than 45 inches, a depth of no more than 22 inches (including tubing connections), and a width no more than 24 inches (in the direction parallel to the wall).

Wet-coil test means a test conducted at test conditions that typically cause water vapor to condense on the test unit evaporator coil.

2. Testing Overview and Conditions

(A) Test VRF systems using AHRI 1230–2010 (incorporated by reference, see § 430.3) and appendix M. Where AHRI 1230–2010 refers to the appendix C therein substitute the provisions of this appendix. In cases where there is a conflict, the language of the test procedure in this appendix takes precedence over AHRI 1230–2010.

For definitions use section 1 of appendix M and section 3 of AHRI 1230–2010 (incorporated by reference, see § 430.3). For rounding requirements, refer to § 430.23(m). For determination of certified ratings, refer to § 429.16 of this chapter.

For test room requirements, refer to section 2.1 of this appendix. For test unit installation requirements refer to sections 2.2.a, 2.2.b, 2.2.c, 2.2.1, 2.2.2, 2.2.3.a, 2.2.3.c, 2.2.4, 2.2.5, and 2.4 to 2.12 of this appendix, and sections 5.1.3 and 5.1.4 of AHRI 1230–2010. The "manufacturer's published instructions," as stated in section 8.2 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3) and "manufacturer's installation instructions" discussed in this appendix mean the manufacturer's installation instructions that come packaged with or appear in the labels applied to the unit. This does not include online manuals. Installation instructions that appear in the labels applied to the unit take precedence over installation instructions that are shipped with the unit.

For general requirements for the test procedure, refer to section 3.1 of this appendix, except for sections 3.1.3 and 3.1.4, which are requirements for indoor air volume and outdoor air volume. For indoor air volume and outdoor air volume requirements, refer instead to section 6.1.5 (except where section 6.1.5 refers to Table 8, refer instead to Table 3 of this appendix) and 6.1.6 of AHRI 1230–2010.

For the test method, refer to sections 3.3 to 3.5 and 3.7 to 3.13 of this appendix. For cooling mode and heating mode test conditions, refer to section 6.2 of AHRI 1230–2010. For calculations of seasonal performance descriptors, refer to section 4 of this appendix.

(B) For systems other than VRF, only a subset of the sections listed in this test procedure apply when testing and determining represented values for a particular unit. Table 1 shows the sections of the test procedure that apply to each system. This table is meant to assist manufacturers in finding the appropriate sections of the test procedure; the appendix sections rather than the table provide the specific requirements for testing, and given the varied nature of available units, manufacturers are responsible for determining which sections apply to each unit tested based on the model characteristics. To use this table, first refer to the sections listed under "all units". Then refer to additional requirements based on:

(1) System configuration(s),

(2) The compressor staging or modulation capability, and

(3) Any special features.

Testing requirements for space-constrained products do not differ from similar equipment that is not space-constrained and thus are not listed separately in this table. Air conditioners and heat pumps are not listed separately in this table, but heating procedures and calculations apply only to heat pumps.

Table 1 Informative Guidance for Using Appendix M1

			Testing conditions	Testing procedures			Calculations		
			General	General	Cooling[*]	Heating[**]	General	Cooling[*]	Heating[**]
Requirements for all units (except VRF)			2.1; 2.2a-c; 2.2.1; 2.2.4; 2.2.4.1; 2.2.4.1 (1); 2.2.4.2; 2.2.5.1-5; 2.2.5.7-8; 2.3; 2.3.1; 2.3.2; 2.4; 2.4.1a,d; 2.5a-c; 2.5.1; 2.5.2 -2.5.4.2; 2.5.5 – 2.13	3.1; 3.1.1-3; 3.1.5-9; 3.11; 3.12	3.3; 3.4; 3.5a-i	3.1.4.7; 3.1.9; 3.7a,b,d; 3.8a,d; 3.8.1; 3.9; 3.10	4.4; 4.5	4.1	4.2
Additional Requirements	System Configurations (more than one may apply)	Single-split system – blower coil	2.2a(1)		3.1.4.1.1; 3.1.4.1.1a,b; 3.1.4.2a-b; 3.1.4.3a-b	3.1.4.4.1; 3.1.4.4.2; 3.1.4.4.3a-b; 3.1.4.5.1; 3.1.4.5.2a-c; 3.1.4.6a-b			
		Single-split system - coil-only	2.2a(1); 2.2d,c; 2.4.2		3.1.4.1.1; 3.1.4.1.1c; 3.1.4.2c; 3.5.1	3.1.4.4.1; 3.1.4.4.2; 3.1.4.4.3c; 3.1.4.5.2d; 3.7c; 3.8b; 3.9f; 3.9.1b			
		Tri-split	2.2a(2)						

		Outdoor unit with no match	2.2e						
		Single-package	2.2.4.1(2); 2.2.5.6b; 2.4.2		3.1.4.1.1; 3.1.4.1.1a,b; 3.1.4.2a-b; 3.1.4.3a-b	3.1.4.4.1; 3.1.4.4.2; 3.1.4.4.3a-b; 3.1.4.5.1; 3.1.4.5.2a-c; 3.1.4.6a-b			
		Heat pump	2.2.5.6.a						
		Heating-only heat pump			3.1.4.1.1 Table 4	3.1.4.4.3			
		Two-capacity northern heat pump		3.1.4.4.2c; 3.1.4.5.2 c-d	3.2.3c	3.6.3			
		Triple-capacity northern heat pump			3.2.5	3.6.6			4.2.6
		SDHV (non-VRF)	2.2b; 2.4.1c; 2.5.4.3						
		Single- zone-multi-coil split and non-VRF multiple-split with duct	2.2a(1),(3); 2.2.3; 2.4.1b		3.1.4.1.1; 3.1.4.1.1a-b; 3.1.4.2a-b; 3.1.4.3a-b	3.1.4.4.1; 3.1.4.4.2; 3.1.4.4.3a-b; 3.1.4.5.1; 3.1.4.5.2a-c; 3.1.4.6a-b			
		Single-zone-multi-coil split and non-VRF multiple-split, ductless	2.2.a(1),(3); 2.2.3		3.1.4.1.2; 3.1.4.2d; 3.1.4.3c; 3.2.4c; 3.5c,g,h; 3.5.2; 3.8c	3.1.4.4.4; 3.1.4.5.2e; 3.1.4.6c; 3.6.4.c; 3.8c			
		VRF multiple-split† and	2.1; 2.2.a; 2.2.b; 2.2.c; 2.2.1;	3.1 (except	3.3-3.5	3.7–3.10	4.4;	4.1	4.2

		VRF SDHV†	2.2.2; 2.2.3.a; 2.2.3.c; 2.2.4; 2.2.5; 2.4-2.12	3.1.3, 3.1.4) 3.1.4.1.1c; 3.11-3.13			4.5		
	Modulation Capability	Single speed compressor, fixed air volume rate			3.2.1	3.6.1		4.1.1	4.2.1
		Single speed compressor, VAV fan			3.2.2	3.6.2		4.1.2	4.2.2
		Two-capacity compressor		3.1.9	3.2.3	3.6.3		4.1.3	4.2.3
		Variable speed compressor			3.2.4	3.6.4		4.1.4	4.2.4
	Special Features	Heat pump with heat comfort controller				3.6.5			4.2.5
		Units with a multi-speed outdoor fan	2.2.2						
		Single indoor unit having multiple indoor blowers			3.2.6	3.6.2; 3.6.7		4.1.5	4.2.7

*Does not apply to heating-only heat pumps.

**Applies only to heat pumps; not to air conditioners.

†Use AHRI 1230-2010 (incorporated by reference, see §430.3), with the sections referenced in section 2(A) of this appendix, in conjunction with the sections set forth in the table to perform test setup, testing, and calculations for determining represented values for VRF multiple-split and VRF SDHV systems.

NOTE: For all units, use section 3.13 of this appendix for off mode testing procedures and section 4.3 of this appendix for off mode calculations. For all units subject to an EER standard, use section 4.6 of this appendix to determine the energy efficiency ratio.

2.1 Test Room Requirements

a. Test using two side-by-side rooms: an indoor test room and an outdoor test room. For multiple-split, single-zone-multi-coil or multi-circuit air conditioners and heat pumps, however, use as many indoor test rooms as needed to accommodate the total number of indoor units. These rooms must comply with the requirements specified in sections 8.1.2 and 8.1.3 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3).

b. Inside these test rooms, use artificial loads during cyclic tests and frost accumulation tests, if needed, to produce stabilized room air temperatures. For one room, select an electric resistance heater(s) having a heating capacity that is approximately equal to the heating capacity of the test unit's condenser. For the second room, select a heater(s) having a capacity that is close to the sensible cooling capacity of the test unit's evaporator. Cycle the heater located in the same room as the test unit evaporator coil ON and OFF when the test unit cycles ON and OFF. Cycle the heater located in the same room as the test unit condensing coil ON and OFF when the test unit cycles OFF and ON.

2.2 Test Unit Installation Requirements

a. Install the unit according to section 8.2 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3), subject to the following additional requirements:

(1) When testing split systems, follow the requirements given in section 6.1.3.5 of AHRI 210/240–2008 (incorporated by reference, see § 430.3). For the vapor refrigerant line(s), use the insulation included with the unit; if no insulation is provided, use insulation meeting the specifications for the insulation in the installation instructions included with the unit by the manufacturer; if no insulation is included with the unit and the installation instructions do not contain provisions for insulating the line(s), fully insulate the vapor refrigerant line(s) with vapor proof insulation having an inside diameter that matches the refrigerant tubing and a nominal thickness of at least 0.5 inches. For the liquid refrigerant line(s), use the insulation included with the unit; if no insulation is provided, use insulation meeting the specifications for the insulation in the installation instructions included with the unit by the manufacturer; if no insulation is included with the unit and the installation instructions do not contain provisions for insulating the line(s), leave the liquid refrigerant line(s) exposed to the air for air conditioners and heat pumps that heat and cool; or, for heating-only heat pumps, insulate the liquid refrigerant line(s) with insulation having an inside diameter that matches the refrigerant tubing and a nominal thickness of at least 0.5 inches. Insulation must be the same for the cooling and heating tests.

(2) When testing split systems, if the indoor unit does not ship with a cooling mode expansion device, test the system using the device as specified in the installation instructions provided with the indoor unit. If none is specified, test the system using a fixed orifice or piston type expansion device that is sized appropriately for the system.

(3) When testing triple-split systems (see section 1.2 of this appendix, Definitions), use the tubing length specified in section 6.1.3.5 of AHRI 210/240–2008 (incorporated by reference, see § 430.3) to connect the outdoor coil, indoor compressor section, and indoor coil while still meeting the requirement of exposing 10 feet of the tubing to outside conditions;

(4) When testing split systems having multiple indoor coils, connect each indoor blower coil unit to the outdoor unit using:

(a) 25 feet of tubing, or

(b) Tubing furnished by the manufacturer, whichever is longer.

(5) When testing split systems having multiple indoor coils, expose at least 10 feet of the system interconnection tubing to the outside conditions. If they are needed to make a secondary measurement of capacity or for verification of refrigerant charge, install refrigerant pressure measuring instruments as described in section 8.2.5 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3). Section 2.10 of this appendix specifies which secondary methods require refrigerant pressure measurements and section 2.2.5.5 of this appendix discusses use of pressure measurements to verify charge. At a minimum, insulate the low-pressure line(s) of a split system with insulation having an inside diameter that matches the refrigerant tubing and a nominal thickness of 0.5 inch.

b. For units designed for both horizontal and vertical installation or for both up-flow and down-flow vertical installations, use the orientation for testing specified by the manufacturer in the certification report. Conduct testing with the following installed:

(1) The most restrictive filter(s);

(2) Supplementary heating coils; and

(3) Other equipment specified as part of the unit, including all hardware used by a heat comfort controller if so equipped (see section 1 of this appendix, Definitions). For small-duct, high-velocity systems, configure all balance dampers or restrictor devices on or inside the unit to fully open or lowest restriction.

c. Testing a ducted unit without having an indoor air filter installed is permissible as long as the minimum external static pressure requirement is adjusted as stated in Table 3, note 3 (see section 3.1.4 of this appendix). Except as noted in section 3.1.10 of this appendix, prevent the indoor air supplementary heating coils from operating during all tests. For uncased coils, create an enclosure using 1 inch fiberglass foil-faced ductboard having a nominal density of 6 pounds per cubic foot. Or alternatively, construct an enclosure using sheet metal or a similar material and insulating material having a thermal resistance ("R" value) between 4 and 6 hr·ft²· °F/Btu. Size the enclosure and seal between the coil and/or drainage pan and the interior of the enclosure as specified in installation instructions shipped with the unit. Also seal between the plenum and inlet and outlet ducts.

d. When testing a coil-only system, install a toroidal-type transformer to power the system's low-voltage components, complying with any additional requirements for the transformer mentioned in the installation manuals included with the unit by the system manufacturer. If the installation manuals do not provide specifications for the transformer, use a transformer having the following features:

(1) A nominal volt-amp rating such that the transformer is loaded between 25 and 90 percent of this rating for the highest level of power measured during the off mode test (section 3.13 of this appendix);

(2) Designed to operate with a primary input of 230 V, single phase, 60 Hz; and

(3) That provides an output voltage that is within the specified range for each low-voltage component. Include the power consumption of the components connected to the transformer as part of the total system power consumption during the off mode tests; do not include the power consumed by the transformer when no load is connected to it.

e. Test an outdoor unit with no match (*i.e.,* that is not distributed in commerce with any indoor units) using a coil-only indoor unit with a single cooling air volume rate whose coil has:

(1) Round tubes of outer diameter no less than 0.375 inches, and

(2) A normalized gross indoor fin surface (NGIFS) no greater than 1.0 square inches per British thermal unit per hour (sq. in./Btu/hr). NGIFS is calculated as follows:

$NGIFS = 2 \times L_f \times W_f \times N_f \div \dot{Q}c(95)$

Where,

L_f = Indoor coil fin length in inches, also height of the coil transverse to the tubes.
W_f = Indoor coil fin width in inches, also depth of the coil.
N_f = Number of fins.
$\dot{Q}_c$ = the measured space cooling capacity of the tested outdoor unit/indoor unit combination as determined from the A2 or A Test whichever applies, Btu/h.

f. If the outdoor unit or the outdoor portion of a single-package unit has a drain pan heater to prevent freezing of defrost water, energize the heater, subject to control to de-energize it when not needed by the heater's thermostat or the unit's control system, for all tests.

g. If pressure measurement devices are connected to refrigerant lines at locations where the refrigerant state changes from liquid to vapor for different parts of the test (*e.g.* heating mode vs. cooling mode, on-cycle vs. off-cycle during cyclic test), the total internal volume of the pressure measurement system (transducers, gauges, connections, and lines) must be no more than 0.25 cubic inches per 12,000 Btu/h certified cooling capacity. Calculate total system internal volume using internal volume reported for pressure transducers and gauges in product literature, if available. If such information is not available, use the value of 0.1 cubic inches internal volume for each pressure transducer, and 0.2 cubic inches for each pressure gauge.

h. For single-split-system coil-only air conditioners, test using an indoor coil that has a normalized gross indoor fin surface (NGIFS) no greater than 2.5 square inches per British thermal unit per hour (sq. in./Btu/hr). NGIFS is calculated as follows:

$NGIFS = 2 \times L_f \times W_f \times N_f \div \dot{Q}c(95)$

Where,

L_f = Indoor coil fin length in inches, also height of the coil transverse to the tubes.

W_f = Indoor coil fin width in inches, also depth of the coil.

N_f = Number of fins.

$\dot{Q}_c$ = the measured space cooling capacity of the tested outdoor unit/indoor unit combination as determined from the A2 or A Test whichever applies, Btu/h.

2.2.1 Defrost Control Settings

Set heat pump defrost controls at the normal settings which most typify those encountered in generalized climatic region IV. (Refer to Figure 1 and Table 19 of section 4.2 of this appendix for information on region IV.) For heat pumps that use a time-adaptive defrost control system (see section 1.2 of this appendix, Definitions), the manufacturer must specify in the certification report the frosting interval to be used during frost accumulation tests and provide the procedure for manually initiating the defrost at the specified time.

2.2.2 Special Requirements for Units Having a Multiple-Speed Outdoor Fan

Configure the multiple-speed outdoor fan according to the installation manual included with the unit by the manufacturer, and thereafter, leave it unchanged for all tests. The controls of the unit must regulate the operation of the outdoor fan during all lab tests except dry coil cooling mode tests. For dry coil cooling mode tests, the outdoor fan must operate at the same speed used during the required wet coil test conducted at the same outdoor test conditions.

2.2.3 Special Requirements for Multi-Split Air Conditioners and Heat Pumps and Ducted Systems Using a Single Indoor Section Containing Multiple Indoor Blowers that Would Normally Operate Using Two or More Indoor Thermostats

Because these systems will have more than one indoor blower and possibly multiple outdoor fans and compressor systems, references in this test procedure to a singular indoor blower, outdoor fan, and/or compressor means all indoor blowers, all outdoor fans, and all compressor systems that are energized during the test.

a. Additional requirements for multi-split air conditioners and heat pumps. For any test where the system is operated at part load (*i.e.,* one or more compressors "off", operating at the intermediate or minimum compressor speed, or at low compressor capacity), the manufacturer must designate in the certification report the indoor coil(s) that are not providing heating or cooling during the test. For variable-speed systems, the manufacturer must designate in the certification report at least one indoor unit that is not providing heating or cooling for all tests conducted at minimum compressor speed. For all other part-load tests, the manufacturer must choose to turn off zero, one, two, or more indoor units. The chosen configuration must remain unchanged for all tests conducted at the same compressor speed/capacity. For any indoor coil that is not providing heating or cooling during a test, cease forced airflow through this indoor coil and block its outlet duct.

b. Additional requirements for ducted split systems with a single indoor unit containing multiple indoor blowers (or for single-package units with an indoor section containing multiple indoor blowers) where the indoor blowers are designed to cycle on and off independently of one another and are not controlled such that all indoor blowers are modulated to always operate at the same air volume rate or speed. For any test where the system is operated at its lowest capacity—*i.e.,* the lowest total air volume rate allowed when operating the single-speed compressor or when operating at low compressor capacity—turn off indoor blowers accounting for at least one-third of the full-load air volume rate unless prevented by the controls of the unit. In such cases, turn off as many indoor blowers as permitted by the unit's controls. Where more than one option exists for meeting this "off" requirement, the manufacturer must indicate in its certification report which indoor blower(s) are turned off. The chosen configuration shall remain unchanged for all tests conducted at the same lowest capacity configuration. For any indoor coil turned off during a test, cease forced airflow through any outlet duct connected to a switched-off indoor blower.

c. For test setups where the laboratory's physical limitations require use of more than the required line length of 25 feet as listed in section 2.2.a.(4) of this appendix, then the actual refrigerant line length used by the laboratory may exceed the required length and the refrigerant line length correction factors in Table 4 of AHRI 1230–2010 are applied to the cooling capacity measured for each cooling mode test.

2.2.4 Wet-Bulb Temperature Requirements for the Air Entering the Indoor and Outdoor Coils

2.2.4.1 Cooling Mode Tests

For wet-coil cooling mode tests, regulate the water vapor content of the air entering the indoor unit so that the wet-bulb temperature is as listed in Tables 4 to 7. As noted in these same tables, achieve a wet-bulb temperature during dry-coil cooling mode tests that results in no condensate forming on the indoor coil. Controlling the water vapor content of the air entering the outdoor side of the unit is not required for cooling mode tests except when testing:

(1) Units that reject condensate to the outdoor coil during wet coil tests. Tables 4–7 list the applicable wet-bulb temperatures.

(2) Single-package units where all or part of the indoor section is located in the outdoor test room. The average dew point temperature of the air entering the outdoor coil during wet coil tests must be within ±3.0 °F of the average dew point temperature of the air entering the indoor coil over the 30-minute data collection interval described in section 3.3 of this appendix. For dry coil tests on such units, it may be necessary to limit the moisture content of the air entering the outdoor coil of the unit to meet the requirements of section 3.4 of this appendix.

2.2.4.2 Heating Mode Tests

For heating mode tests, regulate the water vapor content of the air entering the outdoor unit to the applicable wet-bulb temperature listed in Tables 11 to 14. The wet-bulb temperature entering the indoor side of the heat pump must not exceed 60 °F. Additionally, if the Outdoor Air Enthalpy test method (section 2.10.1 of this appendix) is used while testing a single-package heat pump where all or part of the outdoor section is located in the indoor test room, adjust the wet-bulb temperature for the air entering the indoor side to yield an indoor-side dew point temperature that is as close as reasonably possible to the dew point temperature of the outdoor-side entering air.

2.2.5 Additional Refrigerant Charging Requirements

2.2.5.1 Instructions To Use for Charging

a. Where the manufacturer's installation instructions contain two sets of refrigerant charging criteria, one for field installations and one for lab testing, use the field installation criteria.

b. For systems consisting of an outdoor unit manufacturer's outdoor section and indoor section with differing charging procedures, adjust the refrigerant charge per the outdoor installation instructions.

c. For systems consisting of an outdoor unit manufacturer's outdoor unit and an independent coil manufacturer's indoor unit with differing charging procedures, adjust the refrigerant charge per the indoor unit's installation instructions. If instructions are provided only with the outdoor unit or are provided only with an independent coil manufacturer's indoor unit, then use the provided instructions.

2.2.5.2 Test(s) To Use for Charging

a. Use the tests or operating conditions specified in the manufacturer's installation instructions for charging. The manufacturer's installation instructions may specify use of tests other than the A or A_2 test for charging, but, unless the unit is a heating-only heat pump, determine the air volume rate by the A or A_2 test as specified in section 3.1 of this appendix.

b. If the manufacturer's installation instructions do not specify a test or operating conditions for charging or there are no manufacturer's instructions, use the following test(s):

(1) For air conditioners or cooling and heating heat pumps, use the A or A_2 test.

(2) For cooling and heating heat pumps that do not operate in the H1 or $H1_2$ test (*e.g.* due to shut down by the unit limiting devices) when tested using the charge determined at the A or A_2 test, and for heating-only heat pumps, use the H1 or $H1_2$ test.

2.2.5.3 Parameters To Set and Their Target Values

a. Consult the manufacturer's installation instructions regarding which parameters (*e.g.,* superheat) to set and their target values. If the instructions provide ranges of values, select target values equal to the midpoints of the provided ranges.

b. In the event of conflicting information between charging instructions (*i.e.,* multiple conditions given for charge adjustment where all conditions specified cannot be met), follow the following hierarchy.

(1) For fixed orifice systems:

(i) Superheat

(ii) High side pressure or corresponding saturation or dew-point temperature
(iii) Low side pressure or corresponding saturation or dew-point temperature
(iv) Low side temperature
(v) High side temperature
(vi) Charge weight

(2) For expansion valve systems:
(i) Subcooling
(ii) High side pressure or corresponding saturation or dew-point temperature
(iii) Low side pressure or corresponding saturation or dew-point temperature
(iv) Approach temperature (difference between temperature of liquid leaving condenser and condenser average inlet air temperature)
(v) Charge weight

c. If there are no installation instructions and/or they do not provide parameters and target values, set superheat to a target value of 12 °F for fixed orifice systems or set subcooling to a target value of 10 °F for expansion valve systems.

2.2.5.4 Charging Tolerances

a. If the manufacturer's installation instructions specify tolerances on target values for the charging parameters, set the values within these tolerances.

b. Otherwise, set parameter values within the following test condition tolerances for the different charging parameters:

1. Superheat: ± 2.0 °F
2. Subcooling: ± 2.0 °F
3. High side pressure or corresponding saturation or dew point temperature: ± 4.0 psi or ± 1.0 °F
4. Low side pressure or corresponding saturation or dew point temperature: ± 2.0 psi or ± 0.8 °F
5. High side temperature: ± 2.0 °F
6. Low side temperature: ± 2.0 °F
7. Approach temperature: ± 1.0 °F
8. Charge weight: ± 2.0 ounce

2.2.5.5 Special Charging Instructions

a. Cooling and Heating Heat Pumps

If, using the initial charge set in the A or A_2 test, the conditions are not within the range specified in manufacturer's installation instructions for the H1 or $H1_2$ test, make as small as possible an adjustment to obtain conditions for this test in the specified range. After this adjustment, recheck conditions in the A or A_2 test to confirm that they are still within the specified range for the A or A_2 test.

b. Single-Package Systems

i. Unless otherwise directed by the manufacturer's installation instructions, install one or more refrigerant line pressure gauges during the setup of the unit, located depending on the parameters used to verify or set charge, as described:

(1) Install a pressure gauge at the location of the service valve on the liquid line if charging is on the basis of subcooling, or high side pressure or corresponding saturation or dew point temperature;

(2) Install a pressure gauge at the location of the service valve on the suction line if charging is on the basis of superheat, or low side pressure or corresponding saturation or dew point temperature.

ii. Use methods for installing pressure gauge(s) at the required location(s) as indicated in manufacturer's instructions if specified.

2.2.5.6 Near-Azeotropic and Zeotropic Refrigerants

Perform charging of near-azeotropic and zeotropic refrigerants only with refrigerant in the liquid state.

2.2.5.7 Adjustment of Charge Between Tests

After charging the system as described in this test procedure, use the set refrigerant charge for all tests used to determine performance. Do not adjust the refrigerant charge at any point during testing. If measurements indicate that refrigerant charge has leaked during the test, repair the refrigerant leak, repeat any necessary set-up steps, and repeat all tests.

2.3 Indoor Air Volume Rates

If a unit's controls allow for overspeeding the indoor blower (usually on a temporary basis), take the necessary steps to prevent overspeeding during all tests.

2.3.1 Cooling Tests

a. Set indoor blower airflow-control settings (*e.g.*, fan motor pin settings, fan motor speed) according to the requirements that are specified in section 3.1.4 of this appendix.

b. Express the Cooling full-load air volume rate, the Cooling Minimum Air Volume Rate, and the Cooling Intermediate Air Volume Rate in terms of standard air.

2.3.2 Heating Tests

a. Set indoor blower airflow-control settings (*e.g.*, fan motor pin settings, fan motor speed) according to the requirements that are specified in section 3.1.4 of this appendix.

b. Express the heating full-load air volume rate, the heating minimum air volume rate, the heating intermediate air volume rate, and the heating nominal air volume rate in terms of standard air.

2.4 Indoor Coil Inlet and Outlet Duct Connections. Insulate and/or construct the outlet plenum as described in section 2.4.1 of this appendix and, if installed, the inlet plenum described in section 2.4.2 of this appendix with thermal insulation having a nominal overall resistance (R-value) of at least 19 hr·ft^2· °F/Btu.

2.4.1 Outlet Plenum for the Indoor Unit

a. Attach a plenum to the outlet of the indoor coil. (Note: For some packaged systems, the indoor coil may be located in the outdoor test room.)

b. For systems having multiple indoor coils, or multiple indoor blowers within a single indoor section, attach a plenum to each indoor coil or indoor blower outlet. In order to reduce the number of required airflow measurement apparati (section 2.6 of this appendix), each such apparatus may serve multiple outlet plenums connected to a single common duct leading to the apparatus. More than one indoor test room may be used, which may use one or more common ducts leading to one or more airflow measurement apparati within each test room that contains multiple indoor coils. At the plane where each plenum enters a common duct, install an adjustable airflow damper and use it to equalize the static pressure in each plenum. The outlet air temperature grid(s) (section 2.5.4 of this appendix) and airflow measuring apparatus shall be located downstream of the inlet(s) to the common duct(s). For multiple-circuit (or multi-circuit) systems for which each indoor coil outlet is measured separately and its outlet plenum is not connected to a common duct connecting multiple outlet plenums, install the outlet air temperature grid and airflow measuring apparatus at each outlet plenum.

c. For small-duct, high-velocity systems, install an outlet plenum that has a diameter that is equal to or less than the value listed in Table 2. The limit depends only on the Cooling full-load air volume rate (see section 3.1.4.1.1 of this appendix) and is effective regardless of the flange dimensions on the outlet of the unit (or an air supply plenum adapter accessory, if installed in accordance with the manufacturer's installation instructions).

d. Add a static pressure tap to each face of the (each) outlet plenum, if rectangular, or at four evenly distributed locations along the circumference of an oval or round plenum. Create a manifold that connects the four static pressure taps. Figure 9 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3) shows allowed options for the manifold configuration. The cross-sectional dimensions of plenum must be equal to the dimensions of the indoor unit outlet. See Figures 7a, 7b, and 7c of ANSI/ASHRAE 37–2009 for the minimum length of the (each) outlet plenum and the locations for adding the static pressure taps for ducted blower coil indoor units and single-package systems. See Figure 8 of ANSI/ASHRAE 37–2009 for coil-only indoor units.

TABLE 2—SIZE OF OUTLET PLENUM FOR SMALL-DUCT HIGH-VELOCITY INDOOR UNITS

Cooling full-load air volume rate (scfm)	Maximum diameter * of outlet plenum (inches)
≤500	6
501 to 700	7
701 to 900	8
901 to 1100	9
1101 to 1400	10
1401 to 1750	11

* If the outlet plenum is rectangular, calculate its equivalent diameter using ($4A/P$,) where A is the cross-sectional area and P is the perimeter of the rectangular plenum, and compare it to the listed maximum diameter.

2.4.2 Inlet Plenum for the Indoor Unit

Install an inlet plenum when testing a coil-only indoor unit, a ducted blower coil indoor unit, or a single-package system. See Figures 7b and 7c of ANSI/ASHRAE 37–2009 for cross-sectional dimensions, the minimum length of the inlet plenum, and the locations of the static-pressure taps for ducted blower coil indoor units and single-package systems. See Figure 8 of ANSI/ASHRAE 37–2009 for coil-only indoor units. The inlet plenum duct size shall equal the size of the inlet opening of the air-handling (blower coil) unit or furnace. For a ducted blower coil indoor unit the set up may omit the inlet plenum if an inlet airflow prevention device is installed with a straight internally unobstructed duct on its outlet end with a minimum length equal to 1.5 times the square root of the cross-sectional area of the indoor unit inlet. See section 2.1.5.2 of this appendix for requirements for the locations of static pressure taps built into the inlet airflow prevention device. For all of these arrangements, make a manifold that connects the four static-pressure taps using one of the three configurations specified in section 2.4.1.d. of this appendix. Never use an inlet plenum when testing a non-ducted system.

2.5 Indoor Coil Air Property Measurements and Airflow Prevention Devices

Follow instructions for indoor coil air property measurements as described in section 2.14 of this appendix, unless otherwise instructed in this section.

a. Measure the dry-bulb temperature and water vapor content of the air entering and leaving the indoor coil. If needed, use an air sampling device to divert air to a sensor(s) that measures the water vapor content of the air. See section 5.3 of ANSI/ASHRAE 41.1–2013 (incorporated by reference, see § 430.3) for guidance on constructing an air sampling device. No part of the air sampling device or the tubing transferring the sampled air to the sensor must be within two inches of the test chamber floor, and the transfer tubing must be insulated. The sampling device may also be used for measurement of dry bulb temperature by transferring the sampled air to a remotely located sensor(s). The air sampling device and the remotely located temperature sensor(s) may be used to determine the entering air dry bulb temperature during any test. The air sampling device and the remotely located sensor(s) may be used to determine the leaving air dry bulb temperature for all tests except:

(1) Cyclic tests; and

(2) Frost accumulation tests.

b. Install grids of temperature sensors to measure dry bulb temperatures of both the entering and leaving airstreams of the indoor unit. These grids of dry bulb temperature sensors may be used to measure average dry bulb temperature entering and leaving the indoor unit in all cases (as an alternative to the dry bulb sensor measuring the sampled air). The leaving airstream grid is required for measurement of average dry bulb temperature leaving the indoor unit for the two special cases noted in preamble. The grids are also required to measure the air temperature distribution of the entering and leaving airstreams as described in sections 3.1.8 of this appendix. Two such grids may be applied as a thermopile, to directly obtain the average temperature difference rather than directly measuring both entering and leaving average temperatures.

c. Use of airflow prevention devices. Use an inlet and outlet air damper box, or use an inlet upturned duct and an outlet air damper box when conducting one or both of the cyclic tests listed in sections 3.2 and 3.6 of this appendix on ducted systems. If not conducting any cyclic tests, an outlet air damper box is required when testing ducted and non-ducted heat pumps that cycle off the indoor blower during defrost cycles and there is no other means for preventing natural or forced convection through the indoor unit when the indoor blower is off. Never use an inlet damper box or an inlet upturned duct when testing non-ducted indoor units. An inlet upturned duct is a length of ductwork installed upstream from the inlet such that the indoor duct inlet opening, facing upwards, is sufficiently high to prevent natural convection transfer out of the duct. If an inlet upturned duct is used, install a dry bulb temperature sensor near the inlet opening of the indoor duct at a centerline location not higher than the lowest elevation of the duct edges at the inlet, and ensure that any pair of 5-minute averages of the dry bulb temperature at this location, measured at least every minute during the compressor OFF period of the cyclic test, do not differ by more than 1.0 °F.

2.5.1 Test Set-Up on the Inlet Side of the Indoor Coil: For Cases Where the Inlet Airflow Prevention Device is Installed

a. Install an airflow prevention device as specified in section 2.5.1.1 or 2.5.1.2 of this appendix, whichever applies.

b. For an inlet damper box, locate the grid of entering air dry-bulb temperature sensors, if used, and the air sampling device, or the sensor used to measure the water vapor content of the inlet air, at a location immediately upstream of the damper box inlet. For an inlet upturned duct, locate the grid of entering air dry-bulb temperature sensors, if used, and the air sampling device, or the sensor used to measure the water vapor content of the inlet air, at a location at least one foot downstream from the beginning of the insulated portion of the duct but before the static pressure measurement.

2.5.1.1 If the section 2.4.2 inlet plenum is installed, construct the airflow prevention device having a cross-sectional flow area equal to or greater than the flow area of the inlet plenum. Install the airflow prevention device upstream of the inlet plenum and construct ductwork connecting it to the inlet plenum. If needed, use an adaptor plate or a transition duct section to connect the airflow prevention device with the inlet plenum. Insulate the ductwork and inlet plenum with thermal insulation that has a nominal overall resistance (R-value) of at least 19 hr ·ft^2 · °F/Btu.

2.5.1.2 If the section 2.4.2 inlet plenum is not installed, construct the airflow prevention device having a cross-sectional flow area equal to or greater than the flow area of the air inlet of the indoor unit. Install the airflow prevention device immediately upstream of the inlet of the indoor unit. If needed, use an adaptor plate or a short transition duct section to connect the airflow prevention device with the unit's air inlet. Add static pressure taps at the center of each face of a rectangular airflow prevention device, or at four evenly distributed locations along the circumference of an oval or round airflow prevention device. Locate the pressure taps at a distance from the indoor unit inlet equal to 0.5 times the square root of the cross sectional area of the indoor unit inlet. This location must be between the damper and the inlet of the indoor unit, if a damper is used. Make a manifold that connects the four static pressure taps using one of the configurations shown in Figure 9 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3). Insulate the ductwork with thermal insulation that has a nominal overall resistance (R-value) of at least 19 hr·ft^2 · °F/Btu.

2.5.2 Test Set-Up on the Inlet Side of the Indoor Unit: For Cases Where No Airflow Prevention Device is Installed

If using the section 2.4.2 inlet plenum and a grid of dry bulb temperature sensors, mount the grid at a location upstream of the static pressure taps described in section 2.4.2 of this appendix, preferably at the entrance plane of the inlet plenum. If the section 2.4.2 inlet plenum is not used (*i.e.* for non-ducted units) locate a grid approximately 6 inches upstream of the indoor unit inlet. In the case of a system having multiple non-ducted indoor units, do this for each indoor unit. Position an air sampling device, or the sensor used to measure the water vapor content of the inlet air, immediately upstream of the (each) entering air dry-bulb temperature sensor grid. If a grid of sensors is not used, position the entering air sampling device (or the sensor used to measure the water vapor content of the inlet air) as if the grid were present.

2.5.3 Indoor Coil Static Pressure Difference Measurement

Fabricate pressure taps meeting all requirements described in section 6.5.2 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3) and illustrated in Figure 2A of AMCA 210–2007 (incorporated by reference, see § 430.3), however, if adhering strictly to the description in section 6.5.2 of ANSI/ASHRAE 37–2009, the minimum pressure tap length of 2.5 times the inner diameter of Figure 2A of AMCA 210–2007 is waived. Use a differential pressure measuring instrument that is accurate to within ±0.01 inches of water and has a resolution of at least 0.01 inches of water to measure the static pressure difference between the indoor coil air inlet and outlet. Connect one side of the differential pressure instrument to the manifolded pressure taps installed in the outlet plenum. Connect the other side of the instrument to the manifolded pressure taps located in either the inlet plenum or incorporated within the airflow prevention device. For non-ducted systems that are tested with multiple outlet plenums, measure the static pressure within each outlet plenum relative to the surrounding atmosphere.

2.5.4 Test Set-Up on the Outlet Side of the Indoor Coil

a. Install an interconnecting duct between the outlet plenum described in section 2.4.1 of this appendix and the airflow measuring apparatus described below in section 2.6 of this appendix. The cross-sectional flow area of the interconnecting duct must be equal to or greater than the flow area of the outlet plenum or the common duct used when testing non-ducted units having multiple indoor coils. If needed, use adaptor plates or transition duct sections to allow the connections. To minimize leakage, tape joints within the interconnecting duct (and the outlet plenum). Construct or insulate the entire flow section with thermal insulation having a nominal overall resistance (R-value) of at least 19 hr · ft^2 · °F/Btu.

b. Install a grid(s) of dry-bulb temperature sensors inside the interconnecting duct. Also, install an air sampling device, or the sensor(s) used to measure the water vapor content of the outlet air, inside the interconnecting duct. Locate the dry-bulb temperature grid(s) upstream of the air sampling device (or the in-duct sensor(s) used to measure the water vapor content of the outlet air). Turn off the sampler fan motor during the cyclic tests. Air leaving an indoor unit that is sampled by an air sampling device for remote water-vapor-content measurement must be returned to the interconnecting duct at a location:

(1) Downstream of the air sampling device;

(2) On the same side of the outlet air damper as the air sampling device; and

(3) Upstream of the section 2.6 airflow measuring apparatus.

2.5.4.1 Outlet Air Damper Box Placement and Requirements

If using an outlet air damper box (see section 2.5 of this appendix), the leakage rate from the combination of the outlet plenum, the closed damper, and the duct section that connects these two components must not exceed 20 cubic feet per minute when a negative pressure of 1 inch of water column is maintained at the plenum's inlet.

2.5.4.2 Procedures To Minimize Temperature Maldistribution

Use these procedures if necessary to correct temperature maldistributions. Install a mixing device(s) upstream of the outlet air, dry-bulb temperature grid (but downstream of the outlet plenum static pressure taps). Use a perforated screen located between the mixing device and the dry-bulb temperature grid, with a maximum open area of 40 percent. One or both items should help to meet the maximum outlet air temperature distribution specified in section 3.1.8 of this appendix. Mixing devices are described in sections 5.3.2 and 5.3.3 of ANSI/ASHRAE 41.1–2013 and section 5.2.2 of ASHRAE 41.2–1987 (RA 1992) (incorporated by reference, see § 430.3).

2.5.4.3 Minimizing Air Leakage

For small-duct, high-velocity systems, install an air damper near the end of the interconnecting duct, just prior to the transition to the airflow measuring apparatus of section 2.6 of this appendix. To minimize air leakage, adjust this damper such that the pressure in the receiving chamber of the airflow measuring apparatus is no more than 0.5 inch of water higher than the surrounding test room ambient. If applicable, in lieu of installing a separate damper, use the outlet air damper box of sections 2.5 and 2.5.4.1 of this appendix if it allows variable positioning. Also apply these steps to any conventional indoor blower unit that creates a static pressure within the receiving chamber of the airflow measuring apparatus that exceeds the test room ambient pressure by more than 0.5 inches of water column.

2.5.5 Dry Bulb Temperature Measurement

a. Measure dry bulb temperatures as specified in sections 4, 5.3, 6, and 7 of ANSI/ASHRAE 41.1–2013 (incorporated by reference, see § 430.3).

b. Distribute the sensors of a dry-bulb temperature grid over the entire flow area. The required minimum is 9 sensors per grid.

2.5.6 Water Vapor Content Measurement

Determine water vapor content by measuring dry-bulb temperature combined with the air wet-bulb temperature, dew point temperature, or relative humidity. If used, construct and apply wet-bulb temperature sensors as specified in sections 4, 5, 6, 7.2, 7.3, and 7.4 of ASHRAE 41.6–2014 (incorporated by reference, see § 430.3). The temperature sensor (wick removed) must be accurate to within ±0.2 °F. If used, apply dew point hygrometers as specified in sections 4, 5, 6, 7.1, and 7.4 of ASHRAE 41.6–2014. The dew point hygrometers must be accurate to within ±0.4 °F when operated at conditions that result in the evaluation of dew points above 35 °F. If used, a relative humidity (RH) meter must be accurate to within ±0.7% RH. Other means to determine the psychrometric state of air may be used as long as the measurement accuracy is equivalent to or better than the accuracy achieved from using a wet-bulb temperature sensor that meets the above specifications.

2.5.7 Air Damper Box Performance Requirements

If used (see section 2.5 of this appendix), the air damper box(es) must be capable of being completely opened or completely closed within 10 seconds for each action.

2.6 Airflow Measuring Apparatus

a. Fabricate and operate an airflow measuring apparatus as specified in section 6.2 and 6.3 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3). Place the static pressure taps and position the diffusion baffle (settling means) relative to the chamber inlet as indicated in Figure 12 of AMCA 210–07 and/or Figure 14 of ASHRAE 41.2–1987 (RA 1992) (incorporated by reference, see § 430.3). When measuring the static pressure difference across nozzles and/or velocity pressure at nozzle throats using electronic pressure transducers and a data acquisition system, if high frequency fluctuations cause measurement variations to exceed the test tolerance limits specified in section 9.2 of this appendix and Table 2 of ANSI/ASHRAE 37–2009, dampen the measurement system such that the time constant associated with response to a step change in measurement (time for the response to change 63% of the way from the initial output to the final output) is no longer than five seconds.

b. Connect the airflow measuring apparatus to the interconnecting duct section described in section 2.5.4 of this appendix. See sections 6.1.1, 6.1.2, and 6.1.4, and Figures 1, 2, and 4 of ANSI/ASHRAE 37–2009; and Figures D1, D2, and D4 of AHRI 210/240–2008 (incorporated by reference, see § 430.3) with Addendum 1 and 2 for illustrative examples of how the test apparatus may be applied within a complete laboratory set-up. Instead of following one of these examples, an alternative set-up may be used to handle the air leaving the airflow measuring apparatus and to supply properly conditioned air to the test unit's inlet. The alternative set-up, however, must not interfere with the prescribed means for measuring airflow rate, inlet and outlet air temperatures, inlet and outlet water vapor contents, and external static pressures, nor create abnormal conditions surrounding the test unit. (Note: Do not use an enclosure as described in section 6.1.3 of ANSI/ASHRAE 37–2009 when testing triple-split units.)

2.7 Electrical Voltage Supply

Perform all tests at the voltage specified in section 6.1.3.2 of AHRI 210/240–2008 (incorporated by reference, see § 430.3) for "Standard Rating Tests." If either the indoor or the outdoor unit has a 208V or 200V nameplate voltage and the other unit has a 230V nameplate rating, select the voltage supply on the outdoor unit for testing. Otherwise, supply each unit with its own nameplate voltage. Measure the supply voltage at the terminals on the test unit using a volt meter that provides a reading that is accurate to within ±1.0 percent of the measured quantity.

2.8 Electrical Power and Energy Measurements

a. Use an integrating power (watt-hour) measuring system to determine the electrical energy or average electrical power supplied to all components of the air conditioner or heat pump (including auxiliary components such as controls, transformers, crankcase heater, integral condensate pump on non-ducted indoor units, etc.). The watt-hour measuring system must give readings that are accurate to within ±0.5 percent. For cyclic tests, this accuracy is required during both the ON and OFF cycles. Use either two different scales on the same watt-hour meter or two separate watt-hour meters. Activate the scale or meter having the lower power rating within 15 seconds after beginning an OFF cycle. Activate the scale or meter having the higher power rating within 15 seconds prior to beginning an ON cycle. For ducted blower coil systems, the ON cycle lasts from compressor ON to indoor blower OFF. For ducted coil-only systems, the ON cycle lasts from compressor ON to compressor OFF. For non-ducted units, the ON cycle lasts from indoor blower ON to indoor blower OFF. When testing air conditioners and heat pumps having a variable-speed compressor, avoid using an induction watt/watt-hour meter.

b. When performing section 3.5 and/or 3.8 cyclic tests on non-ducted units, provide instrumentation to determine the average electrical power consumption of the indoor blower motor to within ±1.0 percent. If required according to sections 3.3, 3.4, 3.7, 3.9.1 of this appendix, and/or 3.10 of this appendix, this same instrumentation requirement (to determine the average electrical power consumption of the indoor blower motor to within ±1.0 percent) applies when testing air conditioners and heat pumps having a variable-speed constant-air-volume-rate indoor blower or a variable-speed, variable-air-volume-rate indoor blower.

2.9 Time Measurements

Make elapsed time measurements using an instrument that yields readings accurate to within ±0.2 percent.

2.10 Test Apparatus for the Secondary Space Conditioning Capacity Measurement

For all tests, use the indoor air enthalpy method to measure the unit's capacity. This method uses the test set-up specified in sections 2.4 to 2.6 of this appendix. In addition, for all steady-state tests, conduct a second, independent measurement of capacity as described in section 3.1.1 of this appendix. For split systems, use one of the following secondary measurement methods: outdoor air enthalpy method, compressor calibration method, or refrigerant enthalpy method. For single-package units, use either the outdoor air enthalpy method or the compressor calibration method as the secondary measurement.

2.10.1 Outdoor Air Enthalpy Method

a. To make a secondary measurement of indoor space conditioning capacity using the outdoor air enthalpy method, do the following:

(1) Measure the electrical power consumption of the test unit;

(2) Measure the air-side capacity at the outdoor coil; and

(3) Apply a heat balance on the refrigerant cycle.

b. The test apparatus required for the outdoor air enthalpy method is a subset of the apparatus used for the indoor air enthalpy method. Required apparatus includes the following:

(1) On the outlet side, an outlet plenum containing static pressure taps (sections 2.4, 2.4.1, and 2.5.3 of this appendix),

(2) An airflow measuring apparatus (section 2.6 of this appendix),

(3) A duct section that connects these two components and itself contains the instrumentation for measuring the dry-bulb temperature and water vapor content of the air leaving the outdoor coil (sections 2.5.4, 2.5.5, and 2.5.6 of this appendix), and

(4) On the inlet side, a sampling device and temperature grid (section 2.11.b of this appendix).

c. During the non-ducted tests described in sections 3.11.1 and 3.11.1.1 of this appendix, measure the evaporator and condenser temperatures or pressures. On both the outdoor coil and the indoor coil, solder a thermocouple onto a return bend located at or near the midpoint of each coil or at points not affected by vapor superheat or liquid subcooling. Alternatively, if the test unit is not sensitive to the refrigerant charge, install pressure gages to the access valves or to ports created from tapping into the suction and discharge lines according to sections 7.4.2 and 8.2.5 of ASHRAE 37–2009. Use this alternative approach when testing a unit charged with a zeotropic refrigerant having a temperature glide in excess of 1 °F at the specified test conditions.

2.10.2 Compressor Calibration Method

Measure refrigerant pressures and temperatures to determine the evaporator superheat and the enthalpy of the refrigerant that enters and exits the indoor coil. Determine refrigerant flow rate or, when the superheat of the refrigerant leaving the evaporator is less than 5 °F, total capacity from separate calibration tests conducted under identical operating conditions. When using this method, install instrumentation and measure refrigerant properties according to section 7.4.2 and 8.2.5 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3). If removing the refrigerant before applying refrigerant lines and subsequently recharging, use the steps in 7.4.2 of ANSI/ASHRAE 37–2009 in addition to the methods of section 2.2.5 of this appendix to confirm the refrigerant charge. Use refrigerant temperature and pressure measuring instruments that meet the specifications given in sections 5.1.1 and 5.2 of ANSI/ASHRAE 37–2009.

2.10.3 Refrigerant Enthalpy Method

For this method, calculate space conditioning capacity by determining the refrigerant enthalpy change for the indoor coil and directly measuring the refrigerant flow rate. Use section 7.5.2 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3) for the requirements for this method, including the additional instrumentation requirements, and information on placing the flow meter and a sight glass. Use refrigerant temperature, pressure, and flow measuring instruments that meet the specifications given in sections 5.1.1, 5.2, and 5.5.1 of ANSI/ASHRAE 37–2009. Refrigerant flow measurement device(s), if used, must be either elevated at least two feet from the test chamber floor or placed upon insulating material having a total thermal resistance of at least R–12 and extending at least one foot laterally beyond each side of the device(s)' exposed surfaces.

2.11 Measurement of Test Room Ambient Conditions

Follow instructions for setting up air sampling device and aspirating psychrometer as described in section 2.14 of this appendix, unless otherwise instructed in this section.

a. If using a test set-up where air is ducted directly from the conditioning apparatus to the indoor coil inlet (see Figure 2, Loop Air-Enthalpy Test Method Arrangement, of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3)), add instrumentation to permit measurement of the indoor test room dry-bulb temperature.

b. On the outdoor side, use one of the following two approaches, except that approach (1) is required for all evaporatively-cooled units and units that transfer condensate to the outdoor unit for evaporation using condenser heat.

(1) Use sampling tree air collection on all air-inlet surfaces of the outdoor unit.

(2) Use sampling tree air collection on one or more faces of the outdoor unit and demonstrate air temperature uniformity as follows. Install a grid of evenly-distributed thermocouples on each air-permitting face on the inlet of the outdoor unit. Install the thermocouples on the air sampling device, locate them individually or attach them to a wire structure. If not installed on the air sampling device, install the thermocouple grid 6 to 24 inches from the unit. Evenly space the thermocouples across the coil inlet surface and install them to avoid sampling of discharge air or blockage of air recirculation. The grid of thermocouples must provide at least 16 measuring points per face or one measurement per square foot of inlet face area, whichever is less. Construct this grid and use as per section 5.3 of ANSI/ASHRAE 41.1–2013 (incorporated by reference, see § 430.3). The maximum difference between the average temperatures measured during the test period of any two pairs of these individual thermocouples located at any of the faces of the inlet of the outdoor unit, must not exceed 2.0 °F, otherwise use approach (1).

Locate the air sampling devices at the geometric center of each side; the branches may be oriented either parallel or perpendicular to the longer edges of the air inlet area. Size the air sampling devices in the outdoor air inlet location such that they cover at least 75% of the face area of the side of the coil that they are measuring.

Review air distribution at the test facility point of supply to the unit and remediate as necessary prior to the beginning of testing. Mixing fans can be used to ensure adequate air distribution in the test room. If used, orient mixing fans such that they are pointed away from the air intake so that the mixing fan exhaust does not affect the outdoor coil air volume rate. Particular attention should be given to prevent the mixing fans from affecting (enhancing or limiting) recirculation of condenser fan exhaust air back through the unit. Any fan used to enhance test room air mixing shall not cause air velocities in the vicinity of the test unit to exceed 500 feet per minute

The air sampling device may be larger than the face area of the side being measured. Take care, however, to prevent discharge air from being sampled. If an air sampling device dimension extends beyond the inlet area of the unit, block holes in the air sampling device to prevent sampling of discharge air. Holes can be blocked to reduce the region of coverage of the intake holes both in the direction of the trunk axis or perpendicular to the trunk axis. For intake hole region reduction in the direction of the trunk axis, block holes of one or more adjacent pairs of branches (the branches of a pair connect opposite each other at the same trunk location) at either the outlet end or the closed end of the trunk. For intake hole region reduction perpendicular to the trunk axis, block off the same number of holes on each branch on both sides of the trunk.

Connect a maximum of four (4) air sampling devices to each aspirating psychrometer. In order to proportionately divide the flow stream for multiple air sampling devices for a given aspirating psychrometer, the tubing or conduit conveying sampled air to the psychrometer must be of equivalent lengths for each air sampling device. Preferentially, the air sampling device should be hard connected to the aspirating psychrometer, but if space constraints do not allow this, the assembly shall have a means of allowing a flexible tube to connect the air sampling device to the aspirating psychrometer. Insulate and route the tubing or conduit to prevent heat transfer to the air stream. Insulate any surface of the air conveying tubing in contact with surrounding air at a different temperature than the sampled air with thermal insulation with a nominal thermal resistance (R-value) of at least 19 hr · ft^2 · °F/Btu. Alternatively the conduit may have lower thermal resistance if additional sensor(s) are used to measure dry bulb temperature at the outlet of each air sampling device. No part of the air sampling device or the tubing conducting the sampled air to the sensors may be within two inches of the test chamber floor.

Take pairs of measurements (*e.g.* dry bulb temperature and wet bulb temperature) used to determine water vapor content of sampled air in the same location.

2.12 Measurement of Indoor Blower Speed

When required, measure fan speed using a revolution counter, tachometer, or stroboscope that gives readings accurate to within ±1.0 percent.

2.13 Measurement of Barometric Pressure

Determine the average barometric pressure during each test. Use an instrument that meets the requirements specified in section 5.2 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3).

2.14 Air Sampling Device and Aspirating Psychrometer Requirements

Make air temperature measurements in accordance with ANSI/ASHRAE 41.1–2013 (incorporated by reference, see § 430.3), unless otherwise instructed in this section.

2.14.1 Air Sampling Device Requirements

The air sampling device is intended to draw in a sample of the air at the critical locations of a unit under test. Construct the device from stainless steel, plastic or other suitable, durable materials. It shall have a main flow trunk tube with a series of branch tubes connected to the trunk tube. Holes must be on the side of the sampler facing the upstream direction of the air source. Use other sizes and rectangular shapes, and scale them accordingly with the following guidelines:

1. Minimum hole density of 6 holes per square foot of area to be sampled
2. Sampler branch tube pitch (spacing) of 6 ± 3 in
3. Manifold trunk to branch diameter ratio having a minimum of 3:1 ratio
4. Distribute hole pitch (spacing) equally over the branch (½ pitch from the closed end to the nearest hole)
5. Maximum individual hole to branch diameter ratio of 1:2 (1:3 preferred)

The minimum average velocity through the air sampling device holes must be 2.5 ft/s as determined by evaluating the sum of the open area of the holes as compared to the flow area in the aspirating psychrometer.

2.14.2 Aspirating Psychrometer

The psychrometer consists of a flow section and a fan to draw air through the flow section and measures an average value of the sampled air stream. At a minimum, the flow section shall have a means for measuring the dry bulb temperature (typically, a resistance temperature device (RTD) and a means for measuring the humidity (RTD with wetted sock, chilled mirror hygrometer, or relative humidity sensor). The aspirating psychrometer shall include a fan that either can be adjusted manually or automatically to maintain required velocity across the sensors.

Construct the psychrometer using suitable material which may be plastic (such as polycarbonate), aluminum or other metallic materials. Construct all psychrometers for a given system being tested, using the same material. Design the psychrometers such that radiant heat from the motor (for driving the fan that draws sampled air through the psychrometer) does not affect sensor measurements. For aspirating psychrometers, velocity across the wet bulb sensor must be 1000 ± 200 ft/min. For all other psychrometers, velocity must be as specified by the sensor manufacturer.

3. Testing Procedures

3.1 General Requirements

If, during the testing process, an equipment set-up adjustment is made that would have altered the performance of the unit during any already completed test, then repeat all tests affected by the adjustment. For cyclic tests, instead of maintaining an air volume rate, for each airflow nozzle, maintain the static pressure difference or velocity pressure during an ON period at the same pressure difference or velocity pressure as measured during the steady-state test conducted at the same test conditions.

Use the testing procedures in this section to collect the data used for calculating:

(1) Performance metrics for central air conditioners and heat pumps during the cooling season;

(2) Performance metrics for heat pumps during the heating season; and

(3) Power consumption metric(s) for central air conditioners and heat pumps during the off mode season(s).

3.1.1 Primary and Secondary Test Methods

For all tests, use the indoor air enthalpy method test apparatus to determine the unit's space conditioning capacity. The procedure and data collected, however, differ slightly depending upon whether the test is a steady-state test, a cyclic test, or a frost accumulation test. The following sections described these differences. For all steady-state tests (*i.e.*, the A, A_2, A_1, B, B_2, B_1, C, C_1, EV, F_1, G_1, $H0_1$, H_1, $H1_2$, $H1_1$, HI_N, H_3, $H3_2$, and $H3_1$ Tests), in addition, use one of the acceptable secondary methods specified in section 2.10 of this appendix to determine indoor space conditioning capacity. Calculate this secondary check of capacity according to section 3.11 of this appendix. The two capacity measurements must agree to within 6 percent to constitute a valid test. For this capacity comparison, use the Indoor Air Enthalpy Method capacity that is calculated in section 7.3 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3) (and, if testing a coil-only system, compare capacities before making the after-test fan heat adjustments described in section 3.3, 3.4, 3.7, and 3.10 of this appendix). However, include the appropriate section 3.3 to 3.5 and 3.7 to 3.10 fan heat adjustments within the indoor air enthalpy method capacities used for the section 4 seasonal calculations of this appendix.

3.1.2 Manufacturer-Provided Equipment Overrides

Where needed, the manufacturer must provide a means for overriding the controls of the test unit so that the compressor(s) operates at the specified speed or capacity and the indoor blower operates at the specified speed or delivers the specified air volume rate.

3.1.3 Airflow Through the Outdoor Coil

For all tests, meet the requirements given in section 6.1.3.4 of AHRI 210/240–2008 (incorporated by reference, see § 430.3) when obtaining the airflow through the outdoor coil.

3.1.3.1 Double-Ducted

For products intended to be installed with the outdoor airflow ducted, install the unit with outdoor coil ductwork installed per manufacturer installation instructions. The unit must operate between 0.10 and 0.15 in H_2O external static pressure. Make external static pressure measurements in accordance with ANSI/ASHRAE 37–2009 section 6.4 and 6.5.

3.1.4 Airflow Through the Indoor Coil

Determine airflow setting(s) before testing begins. Unless otherwise specified within this or its subsections, make no changes to the airflow setting(s) after initiation of testing.

3.1.4.1 Cooling Full-Load Air Volume Rate

3.1.4.1.1. Cooling Full-Load Air Volume Rate for Ducted Units

Identify the certified Cooling full-load air volume rate and certified instructions for setting fan speed or controls. If there is no certified Cooling full-load air volume rate, use a value equal to the certified cooling capacity of the unit times 400 scfm per 12,000 Btu/h. If there are no instructions for setting fan speed or controls, use the as-shipped settings. Use the following procedure to confirm and, if necessary, adjust the Cooling full-load air volume rate and the fan speed or control settings to meet each test procedure requirement:

a. For all ducted blower coil systems, except those having a constant-air-volume-rate indoor blower:

Step (1) Operate the unit under conditions specified for the A (for single-stage units) or A_2 test using the certified fan speed or controls settings, and adjust the exhaust fan of the airflow measuring apparatus to achieve the certified Cooling full-load air volume rate;

Step (2) Measure the external static pressure;

Step (3) If this external static pressure is equal to or greater than the applicable minimum external static pressure cited in Table 3, the pressure requirement is satisfied; proceed to step 7 of this section. If this external static pressure is not equal to or greater than the applicable minimum external static pressure cited in Table 3, proceed to step 4 of this section;

Step (4) Increase the external static pressure by adjusting the exhaust fan of the airflow measuring apparatus until either

(i) The applicable Table 3 minimum is equaled or

(ii) The measured air volume rate equals 90 percent or less of the Cooling full-load air volume rate, whichever occurs first;

Step (5) If the conditions of step 4 (i) of this section occur first, the pressure requirement is satisfied; proceed to step 7 of this section. If the conditions of step 4 (ii) of this section occur first, proceed to step 6 of this section;

Step (6) Make an incremental change to the setup of the indoor blower (*e.g.*, next highest fan motor pin setting, next highest fan motor speed) and repeat the evaluation process beginning above, at step 1 of this section. If the indoor blower setup cannot be further changed, increase the external static pressure by adjusting the exhaust fan of the airflow measuring apparatus until the applicable Table 3 minimum is equaled; proceed to step 7 of this section;

Step (7) The airflow constraints have been satisfied. Use the measured air volume rate as the Cooling full-load air volume rate. Use the final fan speed or control settings for all tests that use the Cooling full-load air volume rate.

b. For ducted blower coil systems with a constant-air-volume-rate indoor blower. For all tests that specify the Cooling full-load air volume rate, obtain an external static pressure as close to (but not less than) the applicable Table 3 value that does not cause automatic shutdown of the indoor blower or air volume rate variation Q_{Var}, defined as follows, greater than 10 percent.

$$Q_{Var} = \left[\frac{Q_{max} - Q_{min}}{\left(\frac{Q_{max} + Q_{min}}{2}\right)}\right] * 100$$

Where:

Q_{max} = maximum measured airflow value
Q_{min} = minimum measured airflow value
Q_{Var} = airflow variance, percent

Additional test steps as described in section 3.3.e of this appendix are required if the measured external static pressure exceeds the target value by more than 0.03 inches of water.

c. For coil-only indoor units. For the A or A_2 Test, (exclusively), the pressure drop across the indoor coil assembly must not exceed 0.30 inches of water. If this pressure drop is exceeded, reduce the air volume rate until the measured pressure drop equals the specified maximum. Use this reduced air volume rate for all tests that require the Cooling full-load air volume rate.

TABLE 3—MINIMUM EXTERNAL STATIC PRESSURE FOR DUCTED BLOWER COIL SYSTEMS

Product variety	Minimum external static pressure (in. wc.)
Conventional (i.e., all central air conditioners and heat pumps not otherwise listed in this table)	0.50
Ceiling-mount and Wall-mount	0.30
Mobile Home	0.30
Low Static	0.10
Mid Static	0.30
Small Duct, High Velocity	1.15
Space Constrained	0.30

[1] For ducted units tested without an air filter installed, increase the applicable tabular value by 0.08 inches of water.

[2] See section 1.2, Definitions, to determine for which Table 3 product variety and associated minimum external static pressure requirement equipment qualifies.

[3] If a closed-loop, air-enthalpy test apparatus is used on the indoor side, limit the resistance to airflow on the inlet side of the indoor blower coil to a maximum value of 0.1 inch of water.

d. For ducted systems having multiple indoor blowers within a single indoor section, obtain the full-load air volume rate with all indoor blowers operating unless prevented by the controls of the unit. In such cases, turn on the maximum number of indoor blowers permitted by the unit's controls. Where more than one option exists for meeting this "on" indoor blower requirement, which indoor blower(s) are turned on must match that specified in the certification report. Conduct section 3.1.4.1.1 setup steps for each indoor blower separately. If two or more indoor blowers are connected to a common duct as per section 2.4.1 of this appendix, temporarily divert their air volume to the test room when confirming or adjusting the setup configuration of individual indoor blowers. The allocation of the system's full-load air volume rate assigned to each "on" indoor blower must match that specified by the manufacturer in the certification report.

3.1.4.1.2. Cooling Full-Load Air Volume Rate for Non-Ducted Units

For non-ducted units, the Cooling full-load air volume rate is the air volume rate that results during each test when the unit is operated at an external static pressure of zero inches of water.

3.1.4.2 Cooling Minimum Air Volume Rate

Identify the certified cooling minimum air volume rate and certified instructions for setting fan speed or controls. If there is no certified cooling minimum air volume rate, use the final indoor blower control settings as determined when setting the cooling full-load air volume rate, and readjust the exhaust fan of the airflow measuring apparatus if necessary to reset to the cooling full load air volume obtained in section 3.1.4.1 of this appendix. Otherwise, calculate the target external static pressure and follow instructions a, b, c, d, or e below. The target external static pressure, ΔP_{st_i}, for any test "i" with a specified air volume rate not equal to the Cooling full-load air volume rate is determined as follows:

$$\Delta P_{st\_i} = \Delta P_{st\_full} \left[\frac{Q_i}{Q_{full}}\right]^2$$

Where:

ΔP_{st_i} = target minimum external static pressure for test i;
ΔP_{st_full} = minimum external static pressure for test A or A_2 (Table 3);
Q_i = air volume rate for test i; and
Q_{full} = Cooling full-load air volume rate as measured after setting and/or adjustment as described in section 3.1.4.1.1 of this appendix.

a. For a ducted blower coil system without a constant-air-volume indoor blower, adjust for external static pressure as follows:

Step (1) Operate the unit under conditions specified for the B_1 test using the certified fan speed or controls settings, and adjust the exhaust fan of the airflow measuring apparatus to achieve the certified cooling minimum air volume rate;

Step (2) Measure the external static pressure;

Step (3) If this pressure is equal to or greater than the minimum external static pressure computed above, the pressure requirement is satisfied; proceed to step 7 of this section. If this pressure is not equal to or greater than the minimum external static pressure computed above, proceed to step 4 of this section;

Step (4) Increase the external static pressure by adjusting the exhaust fan of the airflow measuring apparatus until either

(i) The pressure is equal to the minimum external static pressure computed above or

(ii) The measured air volume rate equals 90 percent or less of the cooling minimum air volume rate, whichever occurs first;

Step (5) If the conditions of step 4 (i) of this section occur first, the pressure requirement is satisfied; proceed to step 7 of this section. If the conditions of step 4 (ii) of this section occur first, proceed to step 6 of this section;

Step (6) Make an incremental change to the setup of the indoor blower (*e.g.*, next highest fan motor pin setting, next highest fan motor speed) and repeat the evaluation process beginning above, at step 1 of this section. If the indoor blower setup cannot be further changed, increase the external static pressure by adjusting the exhaust fan of the airflow measuring apparatus until it equals the minimum external static pressure computed above; proceed to step 7 of this section;

Step (7) The airflow constraints have been satisfied. Use the measured air volume rate as the cooling minimum air volume rate. Use the final fan speed or control settings for all tests that use the cooling minimum air volume rate.

b. For ducted units with constant-air-volume indoor blowers, conduct all tests that specify the cooling minimum air volume rate—(*i.e.*, the A_1, B_1, C_1, F_1, and G_1 Tests)—at an external static pressure that does not cause an automatic shutdown of the indoor blower or air volume rate variation Q_{Var}, defined in section 3.1.4.1.1.b of this appendix, greater than 10 percent, while being as close to, but not less than the target minimum external static pressure. Additional test steps as described in section 3.3.e of this appendix are required if the measured external static pressure exceeds the target value by more than 0.03 inches of water.

c. For ducted two-capacity coil-only systems, the cooling minimum air volume rate is the higher of—

(1) The rate specified by the installation instructions included with the unit by the manufacturer; or

(2) 75 percent of the cooling full-load air volume rate. During the laboratory tests on a coil-only (fanless) system, obtain this cooling minimum air volume rate regardless of the pressure drop across the indoor coil assembly.

d. For non-ducted units, the cooling minimum air volume rate is the air volume rate that results during each test when the unit operates at an external static pressure of zero inches of water and at the indoor blower setting used at low compressor capacity (two-capacity system) or minimum compressor speed (variable-speed system). For units having a single-speed compressor and a variable-speed variable-air-volume-rate indoor blower, use the lowest fan setting allowed for cooling.

e. For ducted systems having multiple indoor blowers within a single indoor section, operate the indoor blowers such that the lowest air volume rate allowed by the unit's controls is obtained when operating the lone single-speed compressor or when operating at low compressor capacity while meeting the requirements of section 2.2.3.2 of this appendix for the minimum number of blowers that must be turned off. Using the target external static pressure and the certified air volume rates, follow the procedures described in section 3.1.4.2.a of this appendix if the indoor blowers are not constant-air-volume indoor blowers or as described in section 3.1.4.2.b of this appendix if the indoor blowers are not constant-air-volume indoor blowers. The sum of the individual "on" indoor blowers' air volume rates is the cooling minimum air volume rate for the system.

3.1.4.3 Cooling Intermediate Air Volume Rate

Identify the certified cooling intermediate air volume rate and certified instructions for setting fan speed or controls. If there is no certified cooling intermediate air volume rate, use the final indoor blower control settings as determined when setting the cooling full load air volume rate, and readjust the exhaust fan of the airflow measuring apparatus if necessary to reset to the cooling full load air volume obtained in section 3.1.4.1 of this appendix. Otherwise, calculate target minimum external static pressure as described in section 3.1.4.2 of this appendix, and set the air volume rate as follows.

a. For a ducted blower coil system without a constant-air-volume indoor blower, adjust for external static pressure as described in section 3.1.4.2.a of this appendix for cooling minimum air volume rate.

b. For a ducted blower coil system with a constant-air-volume indoor blower, conduct the E_V Test at an external static pressure that does not cause an automatic shutdown of the indoor blower or air volume rate variation Q_{Var}, defined in section 3.1.4.1.1.b of this appendix, greater than 10 percent, while being as close to, but not less than the target minimum external static pressure. Additional test steps as described in section 3.3.e of this appendix are required if the measured external static pressure exceeds the target value by more than 0.03 inches of water.

c. For non-ducted units, the cooling intermediate air volume rate is the air volume rate that results when the unit operates at an external static pressure of zero inches of water and at the fan speed selected by the controls of the unit for the E_V Test conditions.

3.1.4.4 Heating Full-Load Air Volume Rate

3.1.4.4.1. Ducted Heat Pumps Where the Heating and Cooling Full-Load Air Volume Rates Are the Same

a. Use the Cooling full-load air volume rate as the heating full-load air volume rate for:

(1) Ducted blower coil system heat pumps that do not have a constant-air-volume indoor blower, and that operate at the same airflow-control setting during both the A (or A_2) and the H1 (or $H1_2$) Tests;

(2) Ducted blower coil system heat pumps with constant-air-flow indoor blowers that provide the same airflow for the A (or A_2) and the H1 (or $H1_2$) Tests; and

(3) Ducted heat pumps that are tested with a coil-only indoor unit (except two-capacity northern heat pumps that are tested only at low capacity cooling—see section 3.1.4.4.2 of this appendix).

b. For heat pumps that meet the above criteria "1" and "3," no minimum requirements apply to the measured external or internal, respectively, static pressure. Use the final indoor blower control settings as determined when setting the Cooling full-load air volume rate, and readjust the exhaust fan of the airflow measuring apparatus if necessary to reset to the cooling full-load air volume obtained in section 3.1.4.1 of this appendix. For heat pumps that meet the above criterion "2," test at an external static pressure that does not cause an automatic shutdown of the indoor blower or air volume rate variation Q_{Var}, defined in section 3.1.4.1.1.b of this appendix, greater than 10 percent, while being as close to, but not less than, the same Table 3 minimum external static pressure as was specified for the A (or A_2) cooling mode test. Additional test steps as described in section 3.9.1.c of this appendix are required if the measured external static pressure exceeds the target value by more than 0.03 inches of water.

3.1.4.4.2. Ducted Heat Pumps Where the Heating and Cooling Full-Load Air Volume Rates Are Different Due to Changes in Indoor Blower Operation, *i.e.* Speed Adjustment by the System Controls

Identify the certified heating full-load air volume rate and certified instructions for setting fan speed or controls. If there is no certified heating full-load air volume rate, use the final indoor blower control settings as determined when setting the cooling full-load air volume rate, and readjust the exhaust fan of the airflow measuring apparatus if necessary to reset to the cooling full-load air volume obtained in section 3.1.4.1 of this appendix. Otherwise, calculate the target minimum external static pressure as described in section 3.1.4.2 of this appendix and set the air volume rate as follows.

a. For ducted blower coil system heat pumps that do not have a constant-air-volume indoor blower, adjust for external static pressure as described in section 3.1.4.2.a of this appendix for cooling minimum air volume rate.

b. For ducted heat pumps tested with constant-air-volume indoor blowers installed, conduct all tests that specify the heating full-load air volume rate at an external static pressure that does not cause an automatic shutdown of the indoor blower or air volume rate variation Q_{Var}, defined in section 3.1.4.1.1.b of this appendix, greater than 10 percent, while being as close to, but not less than the target minimum external static pressure. Additional test steps as described in section 3.9.1.c of this appendix are required if the measured external static pressure exceeds the target value by more than 0.03 inches of water.

c. When testing ducted, two-capacity blower coil system northern heat pumps (see section 1.2 of this appendix, Definitions), use the appropriate approach of the above two cases. For coil-only system northern heat pumps, the heating full-load air volume rate is the lesser of the rate specified by the manufacturer in the installation instructions included with the unit or 133 percent of the cooling full-load air volume rate. For this latter case, obtain the heating full-load air volume rate regardless of the pressure drop across the indoor coil assembly.

d. For ducted systems having multiple indoor blowers within a single indoor section, obtain the heating full-load air volume rate using the same "on" indoor blowers as used for the Cooling full-load air volume rate. Using the target external static pressure and the certified air volume rates, follow the procedures as described in section 3.1.4.4.2.a of this appendix if the indoor blowers are not constant-air-volume indoor blowers or as described in section 3.1.4.4.2.b of this appendix if the indoor blowers are constant-air-volume indoor blowers. The sum of the individual "on" indoor blowers' air volume rates is the heating full-load air volume rate for the system.

3.1.4.4.3. Ducted Heating-Only Heat Pumps

Identify the certified heating full-load air volume rate and certified instructions for setting fan speed or controls. If there is no certified heating full-load air volume rate, use a value equal to the certified heating capacity of the unit times 400 scfm per 12,000 Btu/h. If there are no instructions for setting fan speed or controls, use the as-shipped settings.

a. For all ducted heating-only blower coil system heat pumps, except those having a constant-air-volume-rate indoor blower. Conduct the following steps only during the first test, the H1 or $H1_2$ test:

Step (1) Adjust the exhaust fan of the airflow measuring apparatus to achieve the certified heating full-load air volume rate.

Step (2) Measure the external static pressure.

Step (3) If this pressure is equal to or greater than the Table 3 minimum external static pressure that applies given the heating-only heat pump's rated heating capacity, the pressure requirement is satisfied; proceed to step 7 of this section. If this pressure is not equal to or greater than the applicable Table 3 minimum external static pressure, proceed to step 4 of this section;

Step (4) Increase the external static pressure by adjusting the exhaust fan of the airflow measuring apparatus until either—

(i) The pressure is equal to the applicable Table 3 minimum external static pressure; or

(ii) The measured air volume rate equals 90 percent or less of the heating full-load air volume rate, whichever occurs first;

Step (5) If the conditions of step 4 (i) of this section occur first, the pressure requirement is satisfied; proceed to step 7 of this section. If the conditions of step 4 (ii) of this section occur first, proceed to step 6 of this section;

Step (6) Make an incremental change to the setup of the indoor blower (*e.g.*, next highest fan motor pin setting, next highest fan motor speed) and repeat the evaluation process beginning above, at step 1 of this section. If the indoor blower setup cannot be further changed, increase the external static pressure by adjusting the exhaust fan of the airflow measuring apparatus until it equals the applicable Table 3 minimum external static pressure; proceed to step 7 of this section;

Step (7) The airflow constraints have been satisfied. Use the measured air volume rate as the heating full-load air volume rate. Use the final fan speed or control settings for all tests that use the heating full-load air volume rate.

b. For ducted heating-only blower coil system heat pumps having a constant-air-volume-rate indoor blower. For all tests that specify the heating full-load air volume rate, obtain an external static pressure that does not cause an automatic shutdown of the indoor blower or air volume rate variation Q_{Var}, defined in section 3.1.4.1.1.b of this section, greater than 10 percent, while being as close to, but not less than, the applicable Table 3 minimum. Additional test steps as described in section 3.9.1.c of this appendix are required if the measured external static pressure exceeds the target value by more than 0.03 inches of water.

c. For ducted heating-only coil-only system heat pumps in the H1 or $H1_2$ Test, (exclusively), the pressure drop across the indoor coil assembly must not exceed 0.30 inches of water. If this pressure drop is exceeded, reduce the air volume rate until the measured pressure drop equals the specified maximum. Use this reduced air volume rate for all tests that require the heating full-load air volume rate.

3.1.4.4 Non-Ducted Heat Pumps, Including Non-Ducted Heating-Only Heat Pumps

For non-ducted heat pumps, the heating full-load air volume rate is the air volume rate that results during each test when the unit operates at an external static pressure of zero inches of water.

3.1.4.5 Heating Minimum Air Volume Rate

3.1.4.5.1. Ducted Heat Pumps Where the Heating and Cooling Minimum Air Volume Rates are the Same

a. Use the cooling minimum air volume rate as the heating minimum air volume rate for:

(1) Ducted blower coil system heat pumps that do not have a constant-air-volume indoor blower, and that operates at the same airflow-control setting during both the A_1 and the $H1_1$ tests;

(2) Ducted blower coil system heat pumps with constant-air-flow indoor blowers installed that provide the same airflow for the A_1 and the $H1_1$ Tests; and

(3) Ducted coil-only system heat pumps.

b. For heat pumps that meet the above criteria "1" and "3," no minimum requirements apply to the measured external or internal, respectively, static pressure. Use the final indoor blower control settings as determined when setting the cooling minimum air volume rate, and readjust the exhaust fan of the airflow measuring apparatus if necessary to reset to the cooling minimum air volume rate obtained in section 3.1.4.2 of this appendix. For heat pumps that meet the above criterion "2," test at an external static pressure that does not cause an automatic shutdown of the indoor blower or air volume rate variation Q_{Var}, defined in section 3.1.4.1.1.b, greater than 10 percent, while being as close to, but not less than, the same target minimum external static pressure as was specified for the A_1 cooling mode test. Additional test steps as described in section 3.9.1.c of this appendix are required if the measured external static pressure exceeds the target value by more than 0.03 inches of water.

3.1.4.5.2. Ducted Heat Pumps Where the Heating and Cooling Minimum Air Volume Rates are Different Due to Indoor Blower Operation, i.e. Speed Adjustment by the System Controls

Identify the certified heating minimum air volume rate and certified instructions for setting fan speed or controls. If there is no certified heating minimum air volume rate, use the final indoor blower control settings as determined when setting the cooling minimum air volume rate, and readjust the exhaust fan of the airflow measuring apparatus if necessary to reset to the cooling minimum air volume obtained in section 3.1.4.2 of this appendix. Otherwise, calculate the target minimum external static pressure as described in section 3.1.4.2 of this appendix.

a. For ducted blower coil system heat pumps that do not have a constant-air-volume indoor blower, adjust for external static pressure as described in section 3.1.4.2.a of this appendix for cooling minimum air volume rate.

b. For ducted heat pumps tested with constant-air-volume indoor blowers installed, conduct all tests that specify the heating minimum air volume rate—(*i.e.*, the $H0_1$, $H1_1$, $H2_1$, and $H3_1$ Tests)—at an external static pressure that does not cause an automatic shutdown of the indoor blower while being as close to, but not less than the air volume rate variation Q_{Var}, defined in section 3.1.4.1.1.b of this appendix, greater than 10 percent, while being as close to, but not less than the target minimum external static pressure. Additional test steps as described in section 3.9.1.c of this appendix are required if the measured external static pressure exceeds the target value by more than 0.03 inches of water.

c. For ducted two-capacity blower coil system northern heat pumps, use the appropriate approach of the above two cases.

d. For ducted two-capacity coil-only system heat pumps, use the cooling minimum air volume rate as the heating minimum air volume rate. For ducted two-capacity coil-only system northern heat pumps, use the cooling full-load air volume rate as the heating minimum air volume rate. For ducted two-capacity heating-only coil-only system heat pumps, the heating minimum air volume rate is the higher of the rate specified by the manufacturer in the test setup instructions included with the unit or 75 percent of the heating full-load air volume rate. During the laboratory tests on a coil-only system, obtain the heating minimum air volume rate without regard to the pressure drop across the indoor coil assembly.

e. For non-ducted heat pumps, the heating minimum air volume rate is the air volume rate that results during each test when the unit operates at an external static pressure of zero inches of water and at the indoor blower setting used at low compressor capacity (two-capacity system) or minimum compressor speed (variable-speed system). For units having a single-speed compressor and a variable-speed, variable-air-volume-rate indoor blower, use the lowest fan setting allowed for heating.

f. For ducted systems with multiple indoor blowers within a single indoor section, obtain the heating minimum air volume rate using the same "on" indoor blowers as used for the cooling minimum air volume rate. Using the target external static pressure and the certified air volume rates, follow the procedures as described in section 3.1.4.5.2.a of this appendix if the indoor blowers are not constant-air-volume indoor blowers or as described in section 3.1.4.5.2.b of this appendix if the indoor blowers are constant-air-volume indoor blowers. The sum of the individual "on" indoor blowers' air volume rates is the heating full-load air volume rate for the system.

3.1.4.6 Heating Intermediate Air Volume Rate

Identify the certified heating intermediate air volume rate and certified instructions for setting fan speed or controls. If there is no certified heating intermediate air volume rate, use the final indoor blower control settings as determined when setting the heating full-load air volume rate, and readjust the exhaust fan of the airflow measuring apparatus if necessary to reset to the cooling full-load air volume obtained in section 3.1.4.2 of this appendix. Calculate the target minimum external static pressure as described in section 3.1.4.2 of this appendix.

a. For ducted blower coil system heat pumps that do not have a constant-air-volume indoor blower, adjust for external static pressure as described in section 3.1.4.2.a of this appendix for cooling minimum air volume rate.

b. For ducted heat pumps tested with constant-air-volume indoor blowers installed, conduct the $H2_V$ Test at an external static pressure that does not cause an automatic shutdown of the indoor blower or air volume rate variation Q_{Var}, defined in section 3.1.4.1.1.b of this appendix, greater than 10 percent, while being as close to, but not less than the target minimum external static pressure. Additional test steps as described in section 3.9.1.c of this appendix are required if the measured external static pressure exceeds the target value by more than 0.03 inches of water.

c. For non-ducted heat pumps, the heating intermediate air volume rate is the air volume rate that results when the heat pump operates at an external static pressure of zero inches of water and at the fan speed selected by the controls of the unit for the H2$_V$ Test conditions.

3.1.4.7 Heating Nominal Air Volume Rate

The manufacturer must specify the heating nominal air volume rate and the instructions for setting fan speed or controls. Calculate target minimum external static pressure as described in section 3.1.4.2 of this appendix. Make adjustments as described in section 3.14.6 of this appendix for heating intermediate air volume rate so that the target minimum external static pressure is met or exceeded.

3.1.5 Indoor Test Room Requirement When the Air Surrounding the Indoor Unit is Not Supplied From the Same Source as the Air Entering the Indoor Unit

If using a test set-up where air is ducted directly from the air reconditioning apparatus to the indoor coil inlet (see Figure 2, Loop Air-Enthalpy Test Method Arrangement, of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3)), maintain the dry bulb temperature within the test room within ±5.0 °F of the applicable sections 3.2 and 3.6 dry bulb temperature test condition for the air entering the indoor unit. Dew point must be within 2 °F of the required inlet conditions.

3.1.6 Air Volume Rate Calculations

For all steady-state tests and for frost accumulation (H2, H2$_1$, H2$_2$, H2$_V$) tests, calculate the air volume rate through the indoor coil as specified in sections 7.7.2.1 and 7.7.2.2 of ANSI/ASHRAE 37–2009. When using the outdoor air enthalpy method, follow sections 7.7.2.1 and 7.7.2.2 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3) to calculate the air volume rate through the outdoor coil. To express air volume rates in terms of standard air, use:

$$\text{Equation 3-1} \qquad \overline{\dot{V}_s} = \frac{\overline{\dot{V}_{mx}}}{0.075\frac{lbm_{da}}{ft^3}*v_n'*[1+W_n]} = \frac{\overline{\dot{V}_{mx}}}{0.075\frac{lbm_{da}}{ft^3}*v_n}$$

Where:

$\overline{\dot{V}_s}$ = air volume rate of standard (dry) air, (ft^3/min)$_{da}$

$\overline{\dot{V}_{mx}}$ = air volume rate of the air-water vapor mixture, (ft^3/min)$_{mx}$

v_n' = specific volume of air-water vapor mixture at the nozzle, ft^3 per lbm of the air-water vapor mixture

W_n = humidity ratio at the nozzle, lbm of water vapor per lbm of dry air

0.075 = the density associated with standard (dry) air, (lbm/ft^3)

v_n = specific volume of the dry air portion of the mixture evaluated at the dry-bulb temperature, vapor content, and barometric pressure existing at the nozzle, ft^3 per lbm of dry air.

(Note: In the first printing of ANSI/ASHRAE 37–2009, the second IP equation for

$$Q_{mi} \text{ should read, } Q_{mi} = 1097CA_n\sqrt{P_V v_n'})$$

3.1.7 Test Sequence

Before making test measurements used to calculate performance, operate the equipment for the "break-in" period specified in the certification report, which may not exceed 20 hours. Each compressor of the unit must undergo this "break-in" period. When testing a ducted unit (except if a heating-only heat pump), conduct the A or A$_2$ Test first to establish the cooling full-load air volume rate. For ducted heat pumps where the heating and cooling full-load air volume rates are different, make the first heating mode test one that requires the heating full-load air volume rate. For ducted heating-only heat pumps, conduct the H1 or H1$_2$ Test first to establish the heating full-load air volume rate. When conducting a cyclic test, always conduct it immediately after the steady-state test that requires the same test conditions. For variable-speed systems, the first test using the cooling minimum air volume rate should precede the E$_V$ Test, and the first test using the heating minimum air volume rate must precede the H2$_V$ Test. The test laboratory makes all other decisions on the test sequence.

3.1.8 Requirement for the Air Temperature Distribution Leaving the Indoor Coil

For at least the first cooling mode test and the first heating mode test, monitor the temperature distribution of the air leaving the indoor coil using the grid of individual sensors described in sections 2.5 and 2.5.4 of this appendix. For the 30-minute data collection interval used to determine capacity, the maximum spread among the outlet dry bulb temperatures from any data sampling must not exceed 1.5 °F. Install the mixing devices described in section 2.5.4.2 of this appendix to minimize the temperature spread.

3.1.9 Requirement for the Air Temperature Distribution Entering the Outdoor Coil

Monitor the temperatures of the air entering the outdoor coil using air sampling devices and/or temperature sensor grids, maintaining the required tolerances, if applicable, as described in section 2.11 of this appendix.

3.1.10 Control of Auxiliary Resistive Heating Elements

Except as noted, disable heat pump resistance elements used for heating indoor air at all times, including during defrost cycles and if they are normally regulated by a heat comfort controller. For heat pumps equipped with a heat comfort controller, enable the heat pump resistance elements only during the below-described, short test. For single-speed heat pumps covered under section 3.6.1 of this appendix, the short test follows the H1 or, if conducted, the H1C Test. For two-capacity heat pumps and heat pumps covered under section 3.6.2 of this appendix, the short test follows the H1$_2$ Test. Set the heat comfort controller to provide the maximum supply air temperature. With the heat pump operating and while maintaining the heating full-load air volume rate, measure the temperature of the air leaving the indoor-side beginning 5 minutes after activating the heat comfort controller. Sample the outlet dry-bulb temperature at regular intervals that span 5 minutes or less. Collect data for 10 minutes, obtaining at least 3 samples. Calculate the average outlet temperature over the 10-minute interval, T_{CC}.

3.2 Cooling Mode Tests for Different Types of Air Conditioners and Heat Pumps

3.2.1 Tests for a System Having a Single-Speed Compressor and Fixed Cooling Air Volume Rate

This set of tests is for single-speed-compressor units that do not have a cooling minimum air volume rate or a cooling intermediate air volume rate that is different than the cooling full load air volume rate. Conduct two steady-state wet coil tests, the A and B Tests. Use the two optional dry-coil tests, the steady-state C Test and the cyclic D Test, to determine the cooling mode cyclic degradation coefficient, C_D^c. If the two optional tests are conducted but yield a tested C_D^c that exceeds the default C_D^c or if the two optional tests are not conducted, assign C_D^c the default value of 0.25 (for outdoor units with no match) or 0.2 (for all other systems). Table 4 specifies test conditions for these four tests.

TABLE 4—COOLING MODE TEST CONDITIONS FOR UNITS HAVING A SINGLE-SPEED COMPRESSOR AND A FIXED COOLING AIR VOLUME RATE

Test description	Air entering indoor unit temperature (°F)		Air entering outdoor unit temperature (°F)		Cooling air volume rate
	Dry bulb	Wet bulb	Dry bulb	Wet bulb	
A Test—required (steady, wet coil)	80	67	95	[1] 75	Cooling full-load.[2]
B Test—required (steady, wet coil)	80	67	82	[1] 65	Cooling full-load.[2]
C Test—optional (steady, dry coil)	80	(3)	82		Cooling full-load.[2]
D Test—optional (cyclic, dry coil)	80	(3)	82		(4).

[1] The specified test condition only applies if the unit rejects condensate to the outdoor coil.

[2] Defined in section 3.1.4.1 of this appendix.

[3] The entering air must have a low enough moisture content so no condensate forms on the indoor coil. (It is recommended that an indoor wet-bulb temperature of 57 °F or less be used.)

[4] Maintain the airflow nozzles static pressure difference or velocity pressure during the ON period at the same pressure difference or velocity pressure as measured during the C Test.

3.2.2 Tests for a Unit Having a Single-Speed Compressor Where the Indoor Section Uses a Single Variable-Speed Variable-Air-Volume Rate Indoor Blower or Multiple Indoor Blowers

3.2.2.1 Indoor Blower Capacity Modulation That Correlates With the Outdoor Dry Bulb Temperature or Systems With a Single Indoor Coil but Multiple Indoor Blowers

Conduct four steady-state wet coil tests: The A_2, A_1, B_2, and B_1 tests. Use the two optional dry-coil tests, the steady-state C_1 test and the cyclic D_1 test, to determine the cooling mode cyclic degradation coefficient, C_D^c. If the two optional tests are conducted but yield a tested C_D^c that exceeds the default C_D^c or if the two optional tests are not conducted, assign C_D^c the default value of 0.2.

3.2.2.2 Indoor Blower Capacity Modulation Based on Adjusting the Sensible to Total (S/T) Cooling Capacity Ratio

The testing requirements are the same as specified in section 3.2.1 of this appendix and Table 4. Use a cooling full-load air volume rate that represents a normal installation. If performed, conduct the steady-state C Test and the cyclic D Test with the unit operating in the same S/T capacity control mode as used for the B Test.

TABLE 5—COOLING MODE TEST CONDITIONS FOR UNITS WITH A SINGLE-SPEED COMPRESSOR THAT MEET THE SECTION 3.2.2.1 INDOOR UNIT REQUIREMENTS

Test description	Air entering indoor unit temperature (°F)		Air entering outdoor unit temperature (°F)		Cooling air volume rate
	Dry bulb	Wet bulb	Dry bulb	Wet bulb	
A_2 Test—required (steady, wet coil)	80	67	95	[1] 75	Cooling full-load.[2]
A_1 Test—required (steady, wet coil)	80	67	95	[1] 75	Cooling minimum.[3]
B_2 Test—required (steady, wet coil)	80	67	82	[1] 65	Cooling full-load.[2]
B_1 Test—required (steady, wet coil)	80	67	82	[1] 65	Cooling minimum.[3]
C_1 Test[4]—optional (steady, dry coil)	80	(4)	82		Cooling minimum.[3]
D_1 Test[4]—optional (cyclic, dry coil)	80	(4)	82		(5).

[1] The specified test condition only applies if the unit rejects condensate to the outdoor coil.

[2] Defined in section 3.1.4.1 of this appendix.

[3] Defined in section 3.1.4.2 of this appendix.

[4] The entering air must have a low enough moisture content so no condensate forms on the indoor coil. (It is recommended that an indoor wet-bulb temperature of 57 °F or less be used.)

[5] Maintain the airflow nozzles static pressure difference or velocity pressure during the ON period at the same pressure difference or velocity pressure as measured during the C_1 Test.

3.2.3 Tests for a Unit Having a Two-Capacity Compressor (See Section 1.2 of This Appendix, Definitions)

a. Conduct four steady-state wet coil tests: the A_2, B_2, B_1, and F_1 Tests. Use the two optional dry-coil tests, the steady-state C_1 Test and the cyclic D_1 Test, to determine the cooling-mode cyclic-degradation coefficient, C_D^c. If the two optional tests are conducted but yield a tested C_D^c that exceeds the default C_D^c or if the two optional tests are not conducted, assign C_D^c the default value of 0.2. Table 6 specifies test conditions for these six tests.

b. For units having a variable speed indoor blower that is modulated to adjust the sensible to total (S/T) cooling capacity ratio, use cooling full-load and cooling minimum air volume rates that represent a normal installation. Additionally, if conducting the dry-coil tests, operate the unit in the same S/T capacity control mode as used for the B_1 Test.

c. Test two-capacity, northern heat pumps (see section 1.2 of this appendix, Definitions) in the same way as a single speed heat pump with the unit operating exclusively at low compressor capacity (see section 3.2.1 of this appendix and Table 4).

d. If a two-capacity air conditioner or heat pump locks out low-capacity operation at higher outdoor temperatures, then use the two dry-coil tests, the steady-state C_2 Test and the cyclic D_2 Test, to determine the cooling-mode cyclic-degradation coefficient that only applies to on/off cycling from high capacity, $C_D^c(k=2)$. If the two optional tests are conducted but yield a tested $C_D^c(k = 2)$ that exceeds the default $C_D^c(k = 2)$ or if the two optional tests are not conducted, assign $C_D^c(k = 2)$ the default value. The default $C_D^c(k=2)$ is the same value as determined or assigned for the low-capacity cyclic-degradation coefficient, C_D^c [or equivalently, $C_D^c(k=1)$].

TABLE 6—COOLING MODE TEST CONDITIONS FOR UNITS HAVING A TWO-CAPACITY COMPRESSOR

Test description	Air entering indoor unit temperature (°F)		Air entering outdoor unit temperature (°F)		Compressor capacity	Cooling air volume rate
	Dry bulb	Wet bulb	Dry bulb	Wet bulb		
A_2 Test—required (steady, wet coil)	80	67	95	[1] 75	High	Cooling Full-Load.[2]
B_2 Test—required (steady, wet coil)	80	67	82	[1] 65	High	Cooling Full-Load.[2]
B_1 Test—required (steady, wet coil)	80	67	82	[1] 65	Low	Cooling Minimum.[3]
C_2 Test—optional (steady, dry-coil)	80	(4)	82		High	Cooling Full-Load.[2]
D_2 Test—optional (cyclic, dry-coil)	80	(4)	82		High	(5)
C_1 Test—optional (steady, dry-coil)	80	(4)	82		Low	Cooling Minimum.[3]
D_1 Test—optional (cyclic, dry-coil)	80	(4)	82		Low	(6)
F_1 Test—required (steady, wet coil)	80	67	67	[1] 53.5	Low	Cooling Minimum.[3]

[1] The specified test condition only applies if the unit rejects condensate to the outdoor coil.

[2] Defined in section 3.1.4.1 of this appendix.

[3] Defined in section 3.1.4.2 of this appendix.

[4] The entering air must have a low enough moisture content so no condensate forms on the indoor coil. DOE recommends using an indoor air wet-bulb temperature of 57 °F or less.

[5] Maintain the airflow nozzle(s) static pressure difference or velocity pressure during the ON period at the same pressure or velocity as measured during the C_2 Test.

[6] Maintain the airflow nozzle(s) static pressure difference or velocity pressure during the ON period at the same pressure or velocity as measured during the C_1 Test.

3.2.4 Tests for a Unit Having a Variable-Speed Compressor

a. Conduct five steady-state wet coil tests: The A_2, E_V, B_2, B_1, and F_1 Tests. Use the two optional dry-coil tests, the steady-state G_1 Test and the cyclic I_1 Test, to determine the cooling mode cyclic degradation coefficient, $C_D{}^c$. If the two optional tests are conducted but yield a tested $C_D{}^c$ that exceeds the default $C_D{}^c$ or if the two optional tests are not conducted, assign $C_D{}^c$ the default value of 0.25. Table 7 specifies test conditions for these seven tests. The compressor shall operate at the same cooling full speed, measured by RPM or power input frequency (Hz), for both the A_2 and B_2 tests. The compressor shall operate at the same cooling minimum speed, measured by RPM or power input frequency (Hz), for the B_1, F_1, G_1, and I_1 tests. Determine the cooling intermediate compressor speed cited in Table 7 using:

$$\text{Cooling intermediate speed}$$
$$= \text{Cooling minimum speed} + \frac{\text{Cooling full speed} - \text{Cooling minimum speed}}{3}$$

where a tolerance of plus 5 percent or the next higher inverter frequency step from that calculated is allowed.

b. For units that modulate the indoor blower speed to adjust the sensible to total (S/T) cooling capacity ratio, use cooling full-load, cooling intermediate, and cooling minimum air volume rates that represent a normal installation. Additionally, if conducting the dry-coil tests, operate the unit in the same S/T capacity control mode as used for the F_1 Test.

c. For multiple-split air conditioners and heat pumps (except where noted), the following procedures supersede the above requirements: For all Table 7 tests specified for a minimum compressor speed, turn off at least one indoor unit. The manufacturer shall designate the particular indoor unit(s) that is turned off. The manufacturer must also specify the compressor speed used for the Table 7 E_V Test, a cooling-mode intermediate compressor speed that falls within ¼ and ¾ of the difference between the full and minimum cooling-mode speeds. The manufacturer should prescribe an intermediate speed that is expected to yield the highest EER for the given E_V Test conditions and bracketed compressor speed range. The manufacturer can designate that one or more indoor units are turned off for the E_V Test.

TABLE 7—COOLING MODE TEST CONDITION FOR UNITS HAVING A VARIABLE-SPEED COMPRESSOR

Test description	Air entering indoor unit temperature (°F)		Air entering outdoor unit temperature (°F)		Compressor speed	Cooling air volume rate
	Dry bulb	Wet bulb	Dry bulb	Wet bulb		
A_2 Test—required (steady, wet coil)	80	67	95	[1] 75	Cooling Full	Cooling Full-Load.[2]
B_2 Test—required (steady, wet coil)	80	67	82	[1] 65	Cooling Full	Cooling Full-Load.[2]
E_V Test—required (steady, wet coil).	80	67	87	[1] 69	Cooling Intermediate.	Cooling Intermediate.[3]
B_1 Test—required (steady, wet coil)	80	67	82	[1] 65	Cooling Minimum	Cooling Minimum.[4]

TABLE 7—COOLING MODE TEST CONDITION FOR UNITS HAVING A VARIABLE-SPEED COMPRESSOR—Continued

Test description	Air entering indoor unit temperature (°F)		Air entering outdoor unit temperature (°F)		Compressor speed	Cooling air volume rate
	Dry bulb	Wet bulb	Dry bulb	Wet bulb		
F_1 Test—required (steady, wet coil)	80	67	67	[1] 53.5	Cooling Minimum	Cooling Minimum.[4]
G_1 Test[5]—optional (steady, dry-coil).	80	([6])	67	....	Cooling Minimum	Cooling Minimum.[4]
I_1 Test[5]—optional (cyclic, dry-coil)	80	([6])	67	....	Cooling Minimum	([6])

[1] The specified test condition only applies if the unit rejects condensate to the outdoor coil.

[2] Defined in section 3.1.4.1 of this appendix.

[3] Defined in section 3.1.4.3 of this appendix.

[4] Defined in section 3.1.4.2 of this appendix.

[5] The entering air must have a low enough moisture content so no condensate forms on the indoor coil. DOE recommends using an indoor air wet bulb temperature of 57 °F or less.

[6] Maintain the airflow nozzle(s) static pressure difference or velocity pressure during the ON period at the same pressure difference or velocity pressure as measured during the G_1 Test.

3.2.5 Cooling Mode Tests for Northern Heat Pumps With Triple-Capacity Compressors

Test triple-capacity, northern heat pumps for the cooling mode in the same way as specified in section 3.2.3 of this appendix for units having a two-capacity compressor.

3.2.6 Tests for an Air Conditioner or Heat Pump Having a Single Indoor Unit Having Multiple Indoor Blowers and Offering Two Stages of Compressor Modulation

Conduct the cooling mode tests specified in section 3.2.3 of this appendix.

3.3 Test Procedures for Steady-State Wet Coil Cooling Mode Tests (the A, A_2, A_1, B, B_2, B_1, E_V, and F_1 Tests)

a. For the pretest interval, operate the test room reconditioning apparatus and the unit to be tested until maintaining equilibrium conditions for at least 30 minutes at the specified section 3.2 test conditions. Use the exhaust fan of the airflow measuring apparatus and, if installed, the indoor blower of the test unit to obtain and then maintain the indoor air volume rate and/or external static pressure specified for the particular test. Continuously record (see section 1.2 of this appendix, Definitions):

(1) The dry-bulb temperature of the air entering the indoor coil,

(2) The water vapor content of the air entering the indoor coil,

(3) The dry-bulb temperature of the air entering the outdoor coil, and

(4) For the section 2.2.4 of this appendix cases where its control is required, the water vapor content of the air entering the outdoor coil.

Refer to section 3.11 of this appendix for additional requirements that depend on the selected secondary test method.

b. After satisfying the pretest equilibrium requirements, make the measurements specified in Table 3 of ANSI/ASHRAE 37–2009 for the indoor air enthalpy method and the user-selected secondary method. Make said Table 3 measurements at equal intervals that span 5 minutes or less. Continue data sampling until reaching a 30-minute period (*e.g.*, seven consecutive 5-minute samples) where the test tolerances specified in Table 8 are satisfied. For those continuously recorded parameters, use the entire data set from the 30-minute interval to evaluate Table 8 compliance. Determine the average electrical power consumption of the air conditioner or heat pump over the same 30-minute interval.

c. Calculate indoor-side total cooling capacity and sensible cooling capacity as specified in sections 7.3.3.1 and 7.3.3.3 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3). To calculate capacity, use the averages of the measurements (*e.g.* inlet and outlet dry bulb and wet bulb temperatures measured at the psychrometers) that are continuously recorded for the same 30-minute interval used as described above to evaluate compliance with test tolerances. Do not adjust the parameters used in calculating capacity for the permitted variations in test conditions. Evaluate air enthalpies based on the measured barometric pressure. Use the values of the specific heat of air given in section 7.3.3.1 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3) for calculation of the sensible cooling capacities. Assign the average total space cooling capacity, average sensible cooling capacity, and electrical power consumption over the 30-minute data collection interval to the variables $\dot{Q}_c^k(T)$, $\dot{Q}_{sc}^k(T)$ and $\dot{E}_c^k(T)$, respectively. For these three variables, replace the “T” with the nominal outdoor temperature at which the test was conducted. The superscript k is used only when testing multi-capacity units. Use the superscript k=2 to denote a test with the unit operating at high capacity or full speed, k=1 to denote low capacity or minimum speed, and k=v to denote the intermediate speed.

d. For mobile home ducted coil-only system tests, decrease $\dot{Q}_c^k(T)$ by

$$\frac{1385\ Btu/h}{1000\ scfm} * \bar{\dot{V}}_s$$

and increase $\dot{E}_c^k(T)$ by,

$$\frac{406\ W}{1000\ scfm} * \bar{\dot{V}}_s$$

where $\bar{\dot{V}}_s$ is the average measured indoor air volume rate expressed in units of cubic feet per minute of standard air (scfm).

For non-mobile home ducted coil-only system tests, decrease $\dot{Q}_c^k(T)$ by

$$\frac{1505\ Btu/h}{1000\ scfm} * \bar{\dot{V}}_s$$

and increase $\dot{E}_c^k(T)$ by,

$$\frac{441\ W}{1000\ scfm} * \bar{\dot{V}}_s$$

where $\bar{\dot{V}}_s$ is the average measured indoor air volume rate expressed in units of cubic feet per minute of standard air (scfm).

TABLE 8—TEST OPERATING AND TEST CONDITION TOLERANCES FOR SECTION 3.3 STEADY-STATE WET COIL COOLING MODE TESTS AND SECTION 3.4 DRY COIL COOLING MODE TESTS

	Test operating tolerance[1]	Test condition tolerance[1]
Indoor dry-bulb, °F:		
Entering temperature	2.0	0.5
Leaving temperature	2.0	
Indoor wet-bulb, °F:		

TABLE 8—TEST OPERATING AND TEST CONDITION TOLERANCES FOR SECTION 3.3 STEADY-STATE WET COIL COOLING MODE TESTS AND SECTION 3.4 DRY COIL COOLING MODE TESTS—Continued

	Test operating tolerance[1]	Test condition tolerance[1]
Entering temperature	1.0	[2]0.3
Leaving temperature	[2]1.0	
Outdoor dry-bulb, °F:		
Entering temperature	2.0	0.5
Leaving temperature	[3]2.0	
Outdoor wet-bulb, °F:		
Entering temperature	1.0	[4]0.3
Leaving temperature	[3]1.0	
External resistance to airflow, inches of water	0.05	[5]0.02
Electrical voltage, % of rdg	2.0	1.5
Nozzle pressure drop, % of rdg	2.0	

[1] See section 1.2 of this appendix, Definitions.

[2] Only applies during wet coil tests; does not apply during steady-state, dry coil cooling mode tests.

[3] Only applies when using the outdoor air enthalpy method.

[4] Only applies during wet coil cooling mode tests where the unit rejects condensate to the outdoor coil.

[5] Only applies when testing non-ducted units.

e. For air conditioners and heat pumps having a constant-air-volume-rate indoor blower, the five additional steps listed below are required if the average of the measured external static pressures exceeds the applicable sections 3.1.4 minimum (or target) external static pressure (ΔP_{min}) by 0.03 inches of water or more.

(1) Measure the average power consumption of the indoor blower motor ($\dot{E}_{fan,1}$) and record the corresponding external static pressure (ΔP_1) during or immediately following the 30-minute interval used for determining capacity.

(2) After completing the 30-minute interval and while maintaining the same test conditions, adjust the exhaust fan of the airflow measuring apparatus until the external static pressure increases to approximately $\Delta P_1 + (\Delta P_1 - \Delta P_{min})$.

(3) After re-establishing steady readings of the fan motor power and external static pressure, determine average values for the indoor blower power ($\dot{E}_{fan,2}$) and the external static pressure (ΔP_2) by making measurements over a 5-minute interval.

(4) Approximate the average power consumption of the indoor blower motor at ΔP_{min} using linear extrapolation:

$$\dot{E}_{fan,\min} = \frac{\dot{E}_{fan,2} - \dot{E}_{fan,1}}{\Delta P_2 - \Delta P_1}(\Delta P_{\min} - \Delta P_1) + \dot{E}_{fan,1}$$

(5) Increase the total space cooling capacity, $\dot{Q}_c^k(T)$, by the quantity ($\dot{E}_{fan,1} - \dot{E}_{fan,min}$), when expressed on a Btu/h basis. Decrease the total electrical power, $\dot{E}_c^k(T)$, by the same fan power difference, now expressed in watts.

3.4 Test Procedures for the Steady-State Dry-Coil Cooling-Mode Tests (the C, C_1, C_2, and G_1 Tests)

a. Except for the modifications noted in this section, conduct the steady-state dry coil cooling mode tests as specified in section 3.3 of this appendix for wet coil tests. Prior to recording data during the steady-state dry coil test, operate the unit at least one hour after achieving dry coil conditions. Drain the drain pan and plug the drain opening. Thereafter, the drain pan should remain completely dry.

b. Denote the resulting total space cooling capacity and electrical power derived from the test as $\dot{Q}_{ss,dry}$ and $\dot{E}_{ss,dry}$. With regard to a section 3.3 deviation, do not adjust $\dot{Q}_{ss,dry}$ for duct losses (*i.e.*, do not apply section 7.3.3.3 of ANSI/ASHRAE 37–2009). In preparing for the section 3.5 cyclic tests of this appendix, record the average indoor-side air volume rate, $\overline{V}$, specific heat of the air, Cp,a (expressed on dry air basis), specific volume of the air at the nozzles, v'_n, humidity ratio at the nozzles, W_n, and either pressure difference or velocity pressure for the flow nozzles. For units having a variable-speed indoor blower (that provides either a constant or variable air volume rate) that will or may be tested during the cyclic dry coil cooling mode test with the indoor blower turned off (see section 3.5 of this appendix), include the electrical power used by the indoor blower motor among the recorded parameters from the 30-minute test.

c. If the temperature sensors used to provide the primary measurement of the indoor-side dry bulb temperature difference during the steady-state dry-coil test and the subsequent cyclic dry-coil test are different, include measurements of the latter sensors among the regularly sampled data. Beginning at the start of the 30-minute data collection period, measure and compute the indoor-side air dry-bulb temperature difference using both sets of instrumentation, ΔT (Set SS) and ΔT (Set CYC), for each equally spaced data sample. If using a consistent data sampling rate that is less than 1 minute, calculate and record minutely averages for the two temperature differences. If using a consistent sampling rate of one minute or more, calculate and record the two temperature differences from each data sample. After having recorded the seventh (i=7) set of temperature differences, calculate the following ratio using the first seven sets of values:

$$F_{CD} = \frac{1}{7}\sum_{i-6}^{i}\frac{\Delta T(Set\ SS)}{\Delta T(Set\ CYC)}$$

Each time a subsequent set of temperature differences is recorded (if sampling more frequently than every 5 minutes), calculate F_{CD} using the most recent seven sets of values. Continue these calculations until the 30-minute period is completed or until a value for F_{CD} is calculated that falls outside the allowable range of 0.94–1.06. If the latter occurs, immediately suspend the test and identify the cause for the disparity in the two temperature difference measurements. Recalibration of one or both sets of instrumentation may be required. If all the values for F_{CD} are within the allowable range, save the final value of the ratio from the 30-minute test as F_{CD}^*. If the temperature sensors used to provide the primary measurement of the indoor-side dry bulb temperature difference during the steady-state dry- coil test and the subsequent cyclic dry-coil test are the same, set $F_{CD}^* = 1$.

3.5 Test Procedures for the Cyclic Dry-Coil Cooling-Mode Tests (the D, D_1, D_2, and I_1 Tests)

After completing the steady-state dry-coil test, remove the outdoor air enthalpy method test apparatus, if connected, and begin manual OFF/ON cycling of the unit's compressor. The test set-up should otherwise be identical to the set-up used during the steady-state dry coil test. When testing heat pumps, leave the reversing valve during the compressor OFF cycles in the same position as used for the compressor ON cycles, unless automatically changed by the controls of the unit. For units having a variable-speed indoor blower, the manufacturer has the option of electing at the outset whether to conduct the cyclic test with the indoor blower enabled or disabled. Always revert to testing with the indoor blower disabled if cyclic testing with the fan enabled is unsuccessful.

a. For all cyclic tests, the measured capacity must be adjusted for the thermal mass stored in devices and connections located between measured points. Follow the procedure outlined in section 7.4.3.4.5 of ASHRAE 116–2010 (incorporated by reference, see § 430.3) to ensure any required measurements are taken.

b. For units having a single-speed or two-capacity compressor, cycle the compressor OFF for 24 minutes and then ON for 6 minutes ($\Delta\tau_{cyc,dry} = 0.5$ hours). For units having a variable-speed compressor, cycle the compressor OFF for 48 minutes and then ON for 12 minutes ($\Delta\tau_{cyc,dry} = 1.0$ hours). Repeat the OFF/ON compressor cycling pattern until the test is completed. Allow the controls of the unit to regulate cycling of the outdoor fan. If an upturned duct is used, measure the dry-bulb temperature at the inlet of the device at least once every minute and ensure that its test operating tolerance is within 1.0 °F for each compressor OFF period.

c. Sections 3.5.1 and 3.5.2 of this appendix specify airflow requirements through the indoor coil of ducted and non-ducted indoor units, respectively. In all cases, use the exhaust fan of the airflow measuring apparatus (covered under section 2.6 of this appendix) along with the indoor blower of the unit, if installed and operating, to approximate a step response in the indoor coil airflow. Regulate the exhaust fan to quickly obtain and then maintain the flow nozzle static pressure difference or velocity pressure at the same value as was measured during the steady-state dry coil test. The pressure difference or velocity pressure should be within 2 percent of the value from the steady-state dry coil test within 15 seconds after airflow initiation. For units having a variable-speed indoor blower that ramps when cycling on and/or off, use the exhaust fan of the airflow measuring apparatus to impose a step response that begins at the initiation of ramp up and ends at the termination of ramp down.

d. For units having a variable-speed indoor blower, conduct the cyclic dry coil test using the pull-thru approach described below if any of the following occur when testing with the fan operating:

(1) The test unit automatically cycles off;

(2) Its blower motor reverses; or

(3) The unit operates for more than 30 seconds at an external static pressure that is 0.1 inches of water or more higher than the value measured during the prior steady-state test.

For the pull-thru approach, disable the indoor blower and use the exhaust fan of the airflow measuring apparatus to generate the specified flow nozzles static pressure difference or velocity pressure. If the exhaust fan cannot deliver the required pressure difference because of resistance created by the unpowered indoor blower, temporarily remove the indoor blower.

e. Conduct three complete compressor OFF/ON cycles with the test tolerances given in Table 9 satisfied. Calculate the degradation coefficient C_D for each complete cycle. If all three C_D values are within 0.02 of the average C_D then stability has been achieved, use the highest C_D value of these three. If stability has not been achieved, conduct additional cycles, up to a maximum of eight cycles total, until stability has been achieved between three consecutive cycles. Once stability has been achieved, use the highest C_D value of the three consecutive cycles that establish stability. If stability has not been achieved after eight cycles, use the highest C_D from cycle one through cycle eight, or the default C_D, whichever is lower.

f. With regard to the Table 9 parameters, continuously record the dry-bulb temperature of the air entering the indoor and outdoor coils during periods when air flows through the respective coils. Sample the water vapor content of the indoor coil inlet air at least every 2 minutes during periods when air flows through the coil. Record external static pressure and the air volume rate indicator (either nozzle pressure difference or velocity pressure) at least every minute during the interval that air flows through the indoor coil. (These regular measurements of the airflow rate indicator are in addition to the required measurement at 15 seconds after flow initiation.) Sample the electrical voltage at least every 2 minutes beginning 30 seconds after compressor start-up. Continue until the compressor, the outdoor fan, and the indoor blower (if it is installed and operating) cycle off.

g. For ducted units, continuously record the dry-bulb temperature of the air entering (as noted above) and leaving the indoor coil. Or if using a thermopile, continuously record the difference between these two temperatures during the interval that air flows through the indoor coil. For non-ducted units, make the same dry-bulb temperature measurements beginning when the compressor cycles on and ending when indoor coil airflow ceases.

h. Integrate the electrical power over complete cycles of length $\Delta\tau_{cyc,dry}$. For ducted blower coil systems tested with the unit's indoor blower operating for the cycling test, integrate electrical power from indoor blower OFF to indoor blower OFF. For all other ducted units and for non-ducted units, integrate electrical power from compressor OFF to compressor OFF. (Some cyclic tests will use the same data collection intervals to determine the electrical energy and the total space cooling. For other units, terminate data collection used to determine the electrical energy before terminating data collection used to determine total space cooling.)

TABLE 9—TEST OPERATING AND TEST CONDITION TOLERANCES FOR CYCLIC DRY COIL COOLING MODE TESTS

	Test operating tolerance [1]	Test condition tolerance [1]
Indoor entering dry-bulb temperature,[2] °F	2.0	0.5
Indoor entering wet-bulb temperature, °F		(3)
Outdoor entering dry-bulb temperature,[2] °F	2.0	0.5
External resistance to airflow,[2] inches of water	0.05	
Airflow nozzle pressure difference or velocity pressure,[2] % of reading	2.0	[4] 2.0
Electrical voltage,[5] % of rdg	2.0	1.5

[1] See section 1.2 of this appendix, Definitions.

[2] Applies during the interval that air flows through the indoor (outdoor) coil except for the first 30 seconds after flow initiation. For units having a variable-speed indoor blower that ramps, the tolerances listed for the external resistance to airflow apply from 30 seconds after achieving full speed until ramp down begins.

[3] Shall at no time exceed a wet-bulb temperature that results in condensate forming on the indoor coil.

[4] The test condition must be the average nozzle pressure difference or velocity pressure measured during the steady-state dry coil test.

[5] Applies during the interval when at least one of the following—the compressor, the outdoor fan, or, if applicable, the indoor blower—are operating except for the first 30 seconds after compressor start-up.

If the Table 9 tolerances are satisfied over the complete cycle, record the measured electrical energy consumption as $e_{cyc,dry}$ and express it in units of watt-hours. Calculate the total space cooling delivered, $q_{cyc,dry}$, in units of Btu using,

$$q_{cyc,dry} = \frac{60*\bar{\dot{V}}*C_{p,a}*\Gamma}{[v_n'*(1+W_n)]} = \frac{60*\bar{\dot{V}}*C_{p,a}*\Gamma}{v_n} \quad \text{and} \quad \Gamma = F_{CD}^* \int_{\tau_1}^{\tau_2}[T_{a1}(\tau) - T_{a2}(\tau)]\delta\tau,\ hr * °F$$

Where,

$\bar{\dot{V}}$, $C_{p,a}$, V_n' (or v_n), W_n, and F_{CD}^* are the values recorded during the section 3.4 dry coil steady-state test and

$T_{a1}(\tau)$ = dry bulb temperature of the air entering the indoor coil at time τ, °F.

$T_{a2}(\tau)$ = dry bulb temperature of the air leaving the indoor coil at time τ, °F.

τ_1 = for ducted units, the elapsed time when airflow is initiated through the indoor coil; for non-ducted units, the elapsed time when the compressor is cycled on, hr.

τ_2 = the elapsed time when indoor coil airflow ceases, hr.

Adjust the total space cooling delivered, $q_{cyc,dry}$, according to calculation method outlined in section 7.4.3.4.5 of ASHRAE 116–2010 (incorporated by reference, see § 430.3).

3.5.1 Procedures When Testing Ducted Systems

The automatic controls that are normally installed with the test unit must govern the OFF/ON cycling of the air moving equipment on the indoor side (exhaust fan of the airflow measuring apparatus and the indoor blower of the test unit). For ducted coil-only systems rated based on using a fan time-delay relay, control the indoor coil airflow according to the OFF delay listed by the manufacturer in the certification report. For ducted units having a variable-speed indoor blower that has been disabled (and possibly removed), start and stop the indoor airflow at the same instances as if the fan were enabled. For all other ducted coil-only systems, cycle the indoor coil airflow in unison with the cycling of the compressor. If air damper boxes are used, close them on the inlet and outlet side during the OFF period. Airflow through the indoor coil should stop within 3 seconds after the automatic controls of the test unit (act to) de-energize the indoor blower. For mobile home ducted coil-only systems increase $e_{cyc,dry}$ by the quantity,

$$\text{Equation 3.5-2.} \quad \frac{406\ W}{1000\ scfm} * \bar{\dot{V}}_s * [\tau_2 - \tau_1]$$

and decrease $q_{cyc,dry}$ by,

$$\text{Equation 3.5-3.} \quad \frac{1385\ Btu/h}{1000\ scfm} * \bar{\dot{V}}_s * [\tau_2 - \tau_1]$$

where $\bar{\dot{V}}_s$ is the average indoor air volume rate from the section 3.4 dry coil steady-state test and is expressed in units of cubic feet per minute of standard air (scfm). For ducted non-mobile home coil-only units increase $e_{cyc,dry}$ by the quantity,

$$\text{Equation 3.5-2.} \quad \frac{441\ W}{1000\ scfm} * \bar{\dot{V}}_s * [\tau_2 - \tau_1]$$

and decrease $q_{cyc,dry}$ by,

Equation 3.5-3. $\frac{1505\ Btu/h}{1000\ scfm} * \bar{\dot{V}}_s * [\tau_2 - \tau_1]$where $\bar{\dot{V}}_s$ is the average indoor air volume rate from the section 3.4 dry coil steady-state test and is expressed in units of cubic feet per minute of standard air (scfm). For units having a variable-speed indoor blower that is disabled during the cyclic test, increase $e_{cyc,dry}$ and decrease $q_{cyc,dry}$ based on:

a. The product of $[\tau_2 - \tau_1]$ and the indoor blower power measured during or following the dry coil steady-state test; or,

b. The following algorithm if the indoor blower ramps its speed when cycling.

(1) Measure the electrical power consumed by the variable-speed indoor blower at a minimum of three operating conditions: at the speed/air volume rate/external static pressure that was measured during the steady-state test, at operating conditions associated with the midpoint of the ramp-up interval, and at conditions associated with the midpoint of the ramp-down interval. For these measurements, the tolerances on the airflow volume or the external static pressure are the same as required for the section 3.4 steady-state test.

(2) For each case, determine the fan power from measurements made over a minimum of 5 minutes.

(3) Approximate the electrical energy consumption of the indoor blower if it had operated during the cyclic test using all three power measurements. Assume a linear profile during the ramp intervals. The manufacturer must provide the durations of the ramp-up and ramp-down intervals. If the test setup instructions included with the unit by the manufacturer specifies a ramp interval that exceeds 45 seconds, use a 45-second ramp interval nonetheless when estimating the fan energy.

3.5.2 Procedures When Testing Non-Ducted Indoor Units

Do not use airflow prevention devices when conducting cyclic tests on non-ducted indoor units. Until the last OFF/ON compressor cycle, airflow through the indoor coil must cycle off and on in unison with the compressor. For the last OFF/ON compressor cycle—the one used to determine $e_{cyc,dry}$ and $q_{cyc,dry}$—use the exhaust fan of the airflow measuring apparatus and the indoor blower of the test unit to have indoor airflow start 3 minutes prior to compressor cut-on and end three minutes after compressor cutoff. Subtract the electrical energy used by the indoor blower during the 3 minutes prior to compressor cut-on from the integrated electrical energy, $e_{cyc,dry}$. Add the electrical energy used by the indoor blower during the 3 minutes after compressor cutoff to the integrated cooling capacity, $q_{cyc,dry}$. For the case where the non-ducted indoor unit uses a variable-speed indoor blower which is disabled during the cyclic test, correct $e_{cyc,dry}$ and $q_{cyc,dry}$ using the same approach as prescribed in section 3.5.1 of this appendix for ducted units having a disabled variable-speed indoor blower.

3.5.3 Cooling-Mode Cyclic-Degradation Coefficient Calculation

Use the two dry-coil tests to determine the cooling-mode cyclic-degradation coefficient, C_D^c. Append "(k=2)" to the coefficient if it corresponds to a two-capacity unit cycling at high capacity. If the two optional tests are conducted but yield a tested C_D^c that exceeds the default C_D^c or if the two optional tests are not conducted, assign C_D^c the default value of 0.25 for variable-speed compressor systems and outdoor units with no match, and 0.2 for all other systems. The default value for two-capacity units cycling at high capacity, however, is the low-capacity coefficient, *i.e.*, $C_D^c(k=2) = C_D^c$. Evaluate C_D^c using the above results and those from the section 3.4 dry-coil steady-state test.

$$C_D^c = \frac{1 - \frac{EER_{cyc,dry}}{EER_{ss,dry}}}{1 - CLF}$$

where:

$$EER_{cyc,dry} = \frac{q_{cyc,dry}}{e_{cyc,dry}}$$

the average energy efficiency ratio during the cyclic dry coil cooling mode test, Btu/W·h

$$EER_{ss,dry} = \frac{\dot{Q}_{ss,dry}}{\dot{E}_{ss,dry}}$$

the average energy efficiency ratio during the steady-state dry coil cooling mode test,

Btu/W·h

$$CLF = \frac{q_{cyc,dry}}{Q_{ss,dry} * \Delta\tau_{cyc,dry}}$$

the cooling load factor dimensionless

3.6 Heating Mode Tests for Different Types of Heat Pumps, Including Heating-Only Heat Pumps

3.6.1 Tests for a Heat Pump Having a Single-Speed Compressor and Fixed Heating Air Volume Rate

This set of tests is for single-speed-compressor heat pumps that do not have a heating minimum air volume rate or a heating intermediate air volume rate that is different than the heating full load air volume rate. Conduct the optional high temperature cyclic (H1C) test to determine the heating mode cyclic-degradation coefficient, C_D^h. If this optional test is conducted but yields a tested C_D^h that exceeds the default C_D^h or if the optional test is not conducted, assign C_D^h the default value of 0.25. Test conditions for the four tests are specified in Table 10 of this section.

TABLE 10—HEATING MODE TEST CONDITIONS FOR UNITS HAVING A SINGLE-SPEED COMPRESSOR AND A FIXED-SPEED INDOOR BLOWER, A CONSTANT AIR VOLUME RATE INDOOR BLOWER, OR NO INDOOR BLOWER

Test description	Air entering indoor unit temperature (°F)		Air entering outdoor unit temperature (°F)		Heating air volume rate
	Dry bulb	Wet bulb	Dry bulb	Wet bulb	
H1 Test (required, steady)	70	60 (max)	47	43	Heating Full-load.[1]

TABLE 10—HEATING MODE TEST CONDITIONS FOR UNITS HAVING A SINGLE-SPEED COMPRESSOR AND A FIXED-SPEED INDOOR BLOWER, A CONSTANT AIR VOLUME RATE INDOOR BLOWER, OR NO INDOOR BLOWER—Continued

Test description	Air entering indoor unit temperature (°F)		Air entering outdoor unit temperature (°F)		Heating air volume rate
	Dry bulb	Wet bulb	Dry bulb	Wet bulb	
H1C Test (optional, cyclic)	70	60 (max)	47	43	(2).
H2 Test (required)	70	60 (max)	35	33	Heating Full-load.[1]
H3 Test (required, steady)	70	60 (max)	17	15	Heating Full-load.[1]

[1] Defined in section 3.1.4.4 of this appendix.

[2] Maintain the airflow nozzles static pressure difference or velocity pressure during the ON period at the same pressure difference or velocity pressure as measured during the H1 Test.

3.6.2 Tests for a Heat Pump Having a Single-Speed Compressor and a Single Indoor Unit Having Either (1) a Variable Speed, Variable-Air-Rate Indoor Blower Whose Capacity Modulation Correlates With Outdoor Dry Bulb Temperature or (2) Multiple Indoor Blowers.

Conduct five tests: Two high temperature tests ($H1_2$ and $H1_1$), one frost accumulation test ($H2_2$), and two low temperature tests ($H3_2$ and $H3_1$). Conducting an additional frost accumulation test ($H2_1$) is optional. Conduct the optional high temperature cyclic ($H1C_1$) test to determine the heating mode cyclic-degradation coefficient, $C_D{}^h$. If this optional test is conducted but yields a tested $C_D{}^h$ that exceeds the default $C_D{}^h$ or if the optional test is not conducted, assign $C_D{}^h$ the default value of 0.25. Test conditions for the seven tests are specified in Table 11. If the optional $H2_1$ test is not performed, use the following equations to approximate the capacity and electrical power of the heat pump at the $H2_1$ test conditions:

$$\dot{E}_h{}^{k=1}(35) = PR_h{}^{k=2}(35) * \}\dot{E}_h{}^{k=1}(17) + 0.6 * [\dot{E}_h{}^{k=1}(47) - \dot{E}_h{}^{k=1}(17)]\}$$

Where,

$$\dot{Q}R_h^{k=2}(35) = \frac{\dot{Q}_h^{k=2}(35)}{\dot{Q}^{k=2}(17) + 0.6 * [\dot{Q}_h^{k=2}(47) - \dot{Q}_h^{k=2}(17)]}$$

$$PR_h^{k=2}(35) = \frac{\dot{E}_h^{k=2}(35)}{\dot{E}_h^{k=2}(17) + 0.6 * \left[\dot{E}_h^{k=2}(47) - \dot{E}_h^{k=2}(17)\right]}$$

The quantities $\dot{Q}_h{}^{k=2}(47)$, $\dot{E}_h{}^{k=2}(47)$, $\dot{Q}_h{}^{k=1}(47)$, and $\dot{E}_h{}^{k=1}(47)$ are determined from the $H1_2$ and $H1_1$ tests and evaluated as specified in section 3.7 of this appendix; the quantities $\dot{Q}_h{}^{k=2}(35)$ and $\dot{E}_h{}^{k=2}(35)$ are determined from the $H2_2$ test and evaluated as specified in section 3.9 of this appendix; and the quantities $\dot{Q}_h{}^{k=2}(17)$, $\dot{E}_h{}^{k=2}(17)$, $\dot{Q}_h{}^{k=1}(17)$, and $\dot{E}_h{}^{k=1}(17)$, are determined from the $H3_2$ and $H3_1$ tests and evaluated as specified in section 3.10 of this appendix.

TABLE 11—HEATING MODE TEST CONDITIONS FOR UNITS WITH A SINGLE-SPEED COMPRESSOR THAT MEET THE SECTION 3.6.2 INDOOR UNIT REQUIREMENTS

Test description	Air entering indoor unit temperature (°F)		Air entering outdoor unit temperature (°F)		Heating air volume rate
	Dry bulb	Wet bulb	Dry bulb	Wet bulb	
$H1_2$ Test (required, steady)	70	60(max)	47	43	Heating Full-load.[1]
$H1_1$ Test (required, steady)	70	60(max)	47	43	Heating Minimum.[2]
$H1C_1$ Test (optional, cyclic)	70	60(max)	47	43	(3).
$H2_2$ Test (required)	70	60(max)	35	33	Heating Full-load.[1]
$H2_1$ Test (optional)	70	60(max)	35	33	Heating Minimum.[2]
$H3_2$ Test (required, steady)	70	60(max)	17	15	Heating Full-load.[1]
$H3_1$ Test (required, steady)	70	60(max)	17	15	Heating Minimum.[2]

[1] Defined in section 3.1.4.4 of this appendix.

[2] Defined in section 3.1.4.5 of this appendix.

[3] Maintain the airflow nozzles static pressure difference or velocity pressure during the ON period at the same pressure difference or velocity pressure as measured during the $H1_1$ test.

3.6.3 Tests for a Heat Pump Having a Two-Capacity Compressor (See Section 1.2 of This Appendix, Definitions), Including Two-Capacity, Northern Heat Pumps (See Section 1.2 of This Appendix, Definitions)

a. Conduct one maximum temperature test (H0$_1$), two high temperature tests (H1$_2$ and H1$_1$), one frost accumulation test (H2$_2$), and one low temperature test (H3$_2$). Conduct an additional frost accumulation test (H2$_1$) and low temperature test (H3$_1$) if both of the following conditions exist:

(1) Knowledge of the heat pump's capacity and electrical power at low compressor capacity for outdoor temperatures of 37 °F and less is needed to complete the section 4.2.3 of this appendix seasonal performance calculations; and

(2) The heat pump's controls allow low-capacity operation at outdoor temperatures of 37 °F and less.

If the two conditions in a.(1) and a.(2) of this section are met, an alternative to conducting the H2$_1$ frost accumulation is to use the following equations to approximate the capacity and electrical power:

$$\dot{Q}_h^{k=1}(35) = 0.90 * \{\dot{Q}_h^{k=1}(17) + 0.6 * [\dot{Q}_h^{k=1}(47) - \dot{Q}_h^{k=1}(17)]\}$$

$$\dot{E}_h^{k=1}(35) = 0.985 * \{\dot{E}_h^{k=1}(17) + 0.6 * [\dot{E}_h^{k=1}(47) - \dot{E}_h^{k=1}(17)]\}$$

Determine the quantities $\dot{Q}_h^{k=1}$ (47) and $\dot{E}_h^{k=1}$ (47) from the H1$_1$ test and evaluate them according to section 3.7 of this appendix. Determine the quantities $\dot{Q}_h^{k=1}$ (17) and $\dot{E}_h^{k=1}$ (17) from the H3$_1$ test and evaluate them according to section 3.10 of this appendix.

b. Conduct the optional high temperature cyclic test (H1C$_1$) to determine the heating mode cyclic-degradation coefficient, C_D^h. If this optional test is conducted but yields a tested C_D^h that exceeds the default C_D^h or if the optional test is not conducted, assign C_D^h the default value of 0.25. If a two-capacity heat pump locks out low capacity operation at lower outdoor temperatures, conduct the high temperature cyclic test (H1C$_2$) to determine the high-capacity heating mode cyclic-degradation coefficient, C_D^h (k=2). If this optional test at high capacity is conducted but yields a tested C_D^h (k = 2) that exceeds the default C_D^h (k = 2) or if the optional test is not conducted, assign C_D^h the default value. The default C_D^h (k=2) is the same value as determined or assigned for the low-capacity cyclic-degradation coefficient, C_D^h [or equivalently, C_D^h (k=1)]. Table 12 specifies test conditions for these nine tests.

TABLE 12—HEATING MODE TEST CONDITIONS FOR UNITS HAVING A TWO-CAPACITY COMPRESSOR

Test description	Air entering indoor unit temperature (°F)		Air entering outdoor unit temperature (°F)		Compressor capacity	Heating air volume rate
	Dry bulb	Wet bulb	Dry bulb	Wet bulb		
H0$_1$ Test (required, steady)	70	60$^{(max)}$	62	56.5	Low	Heating Minimum.[1]
H1$_2$ Test (required, steady)	70	60$^{(max)}$	47	43	High	Heating Full-Load.[2]
H1C$_2$ Test (optional,[7] cyclic)	70	60$^{(max)}$	47	43	High	(3).
H1$_1$ Test (required)	70	60$^{(max)}$	47	43	Low	Heating Minimum.[1]
H1C$_1$ Test (optional, cyclic)	70	60$^{(max)}$	47	43	Low	(4).
H2$_2$ Test (required)	70	60$^{(max)}$	35	33	High	Heating Full-Load.[2]
H2$_1$ Test[5][6] (required)	70	60$^{(max)}$	35	33	Low	Heating Minimum.[1]
H3$_2$ Test (required, steady)	70	60$^{(max)}$	17	15	High	Heating Full-Load.[2]
H3$_1$ Test[5] (required, steady)	70	60$^{(max)}$	17	15	Low	Heating Minimum.[1]

[1] Defined in section 3.1.4.5 of this appendix.

[2] Defined in section 3.1.4.4 of this appendix.

[3] Maintain the airflow nozzle(s) static pressure difference or velocity pressure during the ON period at the same pressure or velocity as measured during the *H1$_2$* test.

[4] Maintain the airflow nozzle(s) static pressure difference or velocity pressure during the ON period at the same pressure or velocity as measured during the *H1$_1$* test.

[5] Required only if the heat pump's performance when operating at low compressor capacity and outdoor temperatures less than 37 °F is needed to complete the section 4.2.3 *HSPF* calculations.

[6] If table note #5 applies, the section 3.6.3 equations for $\dot{Q}_h^{k=1}(35)$ and $\dot{E}_h^{k=1}(17)$ may be used in lieu of conducting the H2$_1$ test.

[7] Required only if the heat pump locks out low capacity operation at lower outdoor temperatures.

3.6.4 Tests for a Heat Pump Having a Variable-Speed Compressor

a. Conduct one maximum temperature test (H0$_1$), two high temperature tests (H1$_N$ and H1$_1$), one frost accumulation test (H2$_V$), and one low temperature test (H3$_2$). Conducting one or more of the following tests is optional: An additional high temperature test (H1$_2$), an additional frost accumulation test (H2$_2$), and a very low temperature test (H4$_2$). Conduct the optional high temperature cyclic (H1C$_1$) test to determine the heating mode cyclic-degradation coefficient, C_D^h. If this optional test is conducted but yields a tested C_D^h that exceeds the default C_D^h or if the optional test is not conducted, assign C_D^h the default value of 0.25. Test conditions for the nine tests are specified in Table 13. The compressor shall operate at the same heating full speed, measured by RPM or power input frequency (Hz), as the maximum speed at which the system controls would operate the compressor in normal operation in 17 °F ambient temperature, for the H1$_2$, H2$_2$ and H3$_2$ Tests. The compressor shall operate for the H1$_N$ test at the maximum speed at which the system controls would operate the compressor in normal operation in 47 °F ambient temperature. The compressor shall operate at the same heating minimum speed, measured by RPM or power input frequency (Hz), for the H0$_1$, H1C$_1$, and H1$_1$ Tests. Determine the heating intermediate compressor speed cited in Table 13 using the heating mode full and minimum compressors speeds and:

$$\text{Heating intermediate speed} = \text{Heating minimum speed} + \frac{\text{Heating full speed} - \text{Heating minimum speed}}{3}$$

Where a tolerance of plus 5 percent or the next higher inverter frequency step from that calculated is allowed.

b. If one of the high temperature tests ($H1_2$ or $H1_N$) is conducted using the same compressor speed (RPM or power input frequency) as the $H3_2$ test, set the 47 °F capacity and power input values used for calculation of HSPF equal to the measured values for that test:

$\dot{Q}_{hcalc}^{k=2}(47) = \dot{Q}_h^{k=2}(47)$; $\dot{E}_{hcalc}^{k=2}(47) = \dot{E}_h^{k=2}(47)$

Where:

$\dot{Q}_{hcalc}^{k=2}(47)$ and $\dot{E}_{hcalc}^{k=2}(47)$ are the capacity and power input representing full-speed operation at 47 °F for the HSPF calculations,

$\dot{Q}_h^{k=2}(47)$ is the capacity measured in the high temperature test ($H1_2$ or $H1_N$) which used the same compressor speed as the $H3_2$ test, and

$\dot{E}_h^{k=2}(47)$ is the power input measured in the high temperature test ($H1_2$ or $H1_N$) which used the same compressor speed as the $H3_2$ test.

Evaluate the quantities $\dot{Q}_h^{k=2}(47)$ and from $\dot{E}_h^{k=2}(47)$ according to section 3.7.

Otherwise (if no high temperature test is conducted using the same speed (RPM or power input frequency) as the $H3_2$ test), calculate the 47 °F capacity and power input values used for calculation of HSPF as follows:

$\dot{Q}^{k=2}_{hcalc}(47) = \dot{Q}^{k=2}_h(17) * (1 + 30\,°F * CSF)$;
$\dot{E}^{k=2}_{hcalc}(47) = \dot{E}^{k=2}_h(17) * (1 + 30\,°F * PSF)$

Where:

$\dot{Q}^{k=2}_{hcalc}(47)$ and $\dot{E}^{k=2}_{hcalc}(47)$ are the capacity and power input representing full-speed operation at 47 °F for the HSPF calculations,

$\dot{Q}^{k=2}_h(17)$ is the capacity measured in the $H3_2$ test,

$\dot{E}^{k=2}_h(17)$ is the power input measured in the $H3_2$ test,

CSF is the capacity slope factor, equal to 0.0204/°F for split systems and 0.0262/°F for single-package systems, and

PSF is the Power Slope Factor, equal to 0.00455/°F.

c. If the $H2_2$ test is not done, use the following equations to approximate the capacity and electrical power at the $H2_2$ test conditions:

$\dot{Q}^{k=2}_h(35) = 0.90 * \{\dot{Q}^{k=2}_h(17) + 0.6 * [\dot{Q}^{k=2}_{hcalc}(47) - \dot{Q}^{k=2}_h(17)]\}$
$\dot{E}^{k=2}_h(35) = 0.985 * \{\dot{E}^{k=2}_h(17) + 0.6 * [\dot{E}^{k=2}_{hcalc}(47) - \dot{E}^{k=2}_h(17)]\}$

Where:

$\dot{Q}^{k=2}_{hcalc}(47)$ and $\dot{E}^{k=2}_{hcalc}(47)$ are the capacity and power input representing full-speed operation at 47 °F for the HSPF calculations, calculated as described in section b above.

$\dot{Q}^{k=2}_h(17)$ and $\dot{E}^{k=2}_h(17)$ are the capacity and power input measured in the $H3_2$ test.

d. Determine the quantities $\dot{Q}_h^{k=2}(17)$ and $\dot{E}_h^{k=2}(17)$ from the $H3_2$ test, determine the quantities $\dot{Q}_h^{k=2}(5)$ and $\dot{E}_h^{k=2}(5)$ from the $H4_2$ test, and evaluate all four according to section 3.10.

TABLE 13—HEATING MODE TEST CONDITIONS FOR UNITS HAVING A VARIABLE-SPEED COMPRESSOR

Test description	Air entering indoor unit temperature (°F)		Air entering outdoor unit temperature (°F)		Compressor speed	Heating air volume rate
	Dry bulb	Wet bulb	Dry bulb	Wet bulb		
$H0_1$ test (required, steady)	70	$60^{(max)}$	62	56.5	Heating Minimum	Heating Minimum.[1]
$H1_2$ test (optional, steady)	70	$60^{(max)}$	47	43	Heating Full[4]	Heating Full-Load.[3]
$H1_1$ test (required, steady)	70	$60^{(max)}$	47	43	Heating Minimum	Heating Minimum.[1]
$H1_N$ test (required, steady)	70	$60^{(max)}$	47	43	Heating Full[5]	Heating Full-Load.[3]
$H1C_1$ test (optional, cyclic)	70	$60^{(max)}$	47	43	Heating Minimum	([2])
$H2_2$ test (optional)	70	$60^{(max)}$	35	33	Heating Full[4]	Heating Full-Load.[3]
$H2_V$ test (required)	70	$60^{(max)}$	35	33	Heating Intermediate.	Heating Intermediate.[6]
$H3_2$ test (required, steady)	70	$60^{(max)}$	17	15	Heating Full[4]	Heating Full-Load.[3]
$H4_2$ test (optional, steady)	70	$60^{(max)}$	5	3.5	Heating Full	Heating Full-Load.[3]

[1] Defined in section 3.1.4.5 of this appendix.
[2] Maintain the airflow nozzle(s) static pressure difference or velocity pressure during an ON period at the same pressure or velocity as measured during the $H1_1$ test.
[3] Defined in section 3.1.4.4 of this appendix.
[4] Maximum speed that the system controls would operate the compressor in normal operation in 17 °F ambient temperature. The $H1_2$ test is not needed if the $H1_N$ test uses this same compressor speed.
[5] Maximum speed that the system controls would operate the compressor in normal operation in 47 °F ambient temperature.
[6] Defined in section 3.1.4.6 of this appendix.

e. For multiple-split heat pumps (only), the following procedures supersede the above requirements. For all Table 13 tests specified for a minimum compressor speed, turn off at least one indoor unit. The manufacturer shall designate the particular indoor unit(s) that is turned off. The manufacturer must also specify the compressor speed used for the Table 13 $H2_V$ test, a heating mode intermediate compressor speed that falls within 1/4 and 3/4 of the difference between the full and minimum heating mode speeds. The manufacturer should prescribe an intermediate speed that is expected to yield the highest COP for the given $H2_V$ test conditions and bracketed compressor speed range. The manufacturer can designate that one or more specific indoor units are turned off for the $H2_V$ test.

3.6.5 Additional Test for a Heat Pump Having a Heat Comfort Controller

Test any heat pump that has a heat comfort controller (see section 1.2 of this appendix, Definitions) according to section 3.6.1, 3.6.2, or 3.6.3, whichever applies, with the heat comfort controller disabled. Additionally, conduct the abbreviated test described in section 3.1.9 of this appendix with the heat comfort controller active to determine the system's maximum supply air temperature. (Note: heat pumps having a variable speed compressor and a heat comfort controller are not covered in the test procedure at this time.)

3.6.6 Heating Mode Tests for Northern Heat Pumps With Triple-Capacity Compressors

Test triple-capacity, northern heat pumps for the heating mode as follows:

a. Conduct one maximum-temperature test ($H0_1$), two high-temperature tests ($H1_2$ and $H1_1$), one frost accumulation test ($H2_2$), two low-temperature tests ($H3_2$, $H3_3$), and one minimum-temperature test ($H4_3$). Conduct an additional frost accumulation test ($H2_1$) and low-temperature test ($H3_1$) if both of the following conditions exist: (1) Knowledge of the heat pump's capacity and electrical power at low compressor capacity for outdoor temperatures of 37 °F and less is needed to complete the section 4.2.6 seasonal performance calculations; and (2) the heat pump's controls allow low-capacity operation at outdoor temperatures of 37 °F and less. If the above two conditions are met, an alternative to conducting the $H2_1$ frost accumulation test to determine $\dot{Q}_h^{k=1}(35)$ and $\dot{E}_h^{k=1}(35)$ is to use the following equations to approximate this capacity and electrical power:

$\dot{Q}^{k=1}{}_h(35) = 0.90 * \{\dot{Q}^{k=1}{}_h(17) + 0.6 * [\dot{Q}^{k=1}{}_h(47) - \dot{Q}^{k=1}{}_h(17)]\}$

$\dot{E}^{k=1}{}_h(35) = 0.985 * \{\dot{E}^{k=1}{}_h(17) + 0.6 * [\dot{E}^{k=1}{}_h(47) - \dot{E}^{k=1}{}_h(17)]\}$

In evaluating the above equations, determine the quantities $\dot{Q}_h^{k=1}(47)$ from the $H1_1$ test and evaluate them according to section 3.7 of this appendix. Determine the quantities $\dot{Q}_h^{k=1}(17)$ and $\dot{E}_h^{k=1}(17)$ from the $H3_1$ test and evaluate them according to section 3.10 of this appendix. Use the paired values of $\dot{Q}_h^{k=1}(35)$ and $\dot{E}_h^{k=1}(35)$ derived from conducting the $H2_1$ frost accumulation test and evaluated as specified in section 3.9.1 of this appendix or use the paired values calculated using the above default equations, whichever contribute to a higher Region IV HSPF based on the DHRmin.

b. Conducting a frost accumulation test ($H2_3$) with the heat pump operating at its booster capacity is optional. If this optional test is not conducted, determine $\dot{Q}_h^{k=3}(35)$ and $\dot{E}_h^{k=3}(35)$ using the following equations to approximate this capacity and electrical power:

$\dot{Q}_h^{k=3}(35) = \dot{Q}R_h^{k=2}(35) * \{\dot{Q}_h^{k=3}(17) + 1.20 * [\dot{Q}_h^{k=3}(17) - \dot{Q}_h^{k=3}(2)]\}$

$\dot{E}_h^{k=3}(35) = PR_h^{k=2}(35) * \{\dot{E}_h^{k=3}(17) + 1.20 * [\dot{E}_h^{k=3}(17) - \dot{E}_h^{k=3}(2)]\}$

Where:

$$QR_h^{k=2}(35) = \frac{\dot{Q}_h^{k=2}(35)}{\dot{Q}_h^{k=2}(17) + 0.6 * \left[\dot{Q}_h^{k=2}(47) - \dot{Q}_h^{k=2}(17)\right]}$$

$$PR_h^{k=2}(35) = \frac{\dot{E}_h^{k=2}(35)}{\dot{E}_h^{k=2}(17) + 0.6 * \left[\dot{E}_h^{k=2}(47) - \dot{E}_h^{k=2}(17)\right]}$$

Determine the quantities $Q_h^{k=2}(47)$ and $E_h^{k=2}(47)$ from the $H1_2$ test and evaluate them according to section 3.7 of this appendix. Determine the quantities $Q_h^{k=2}(35)$ and $E_h^{k=2}(35)$ from the $H2_2$ test and evaluate them according to section 3.9.1 of this appendix. Determine the quantities $Q_h^{k=2}(17)$ and $E_h^{k=2}(17)$ from the $H3_2$ test, determine the quantities $Q_h^{k=3}(17)$ and $E_h^{k=3}(17)$ from the $H3_3$ test, and determine the quantities $Q_h^{k=3}(2)$ and $E_h^{k=3}(2)$ from the $H4_3$ test. Evaluate all six quantities according to section 3.10 of this appendix. Use the paired values of $Q_h^{k=3}(35)$ and $E_h^{k=3}(35)$ derived from conducting the $H2_3$ frost accumulation test and calculated as specified in section 3.9.1 of this appendix or use the paired values calculated using the above default equations, whichever contribute to a higher Region IV HSPF based on the DHRmin.

c. Conduct the optional high-temperature cyclic test ($H1C_1$) to determine the heating mode cyclic-degradation coefficient, C_D^h. A default value for C_D^h of 0.25 may be used in lieu of conducting the cyclic. If a triple-capacity heat pump locks out low capacity operation at lower outdoor temperatures, conduct the high-temperature cyclic test ($H1C_2$) to determine the high-capacity heating mode cyclic-degradation coefficient, C_D^h (k=2). The default C_D^h (k=2) is the same value as determined or assigned for the low-capacity cyclic-degradation coefficient, C_D^h [or equivalently, C_D^h (k=1)]. Finally, if a triple-capacity heat pump locks out both low and high capacity operation at the lowest outdoor temperatures, conduct the low-temperature cyclic test ($H3C_3$) to determine the booster-capacity heating mode cyclic-degradation coefficient, C_D^h (k=3). The default C_D^h (k=3) is the same value as determined or assigned for the high-capacity cyclic-degradation coefficient, C_D^h [or equivalently, C_D^h (k=2)]. Table 14 specifies test conditions for all 13 tests.

TABLE 14—HEATING MODE TEST CONDITIONS FOR UNITS WITH A TRIPLE-CAPACITY COMPRESSOR

Test description	Air entering indoor unit temperature °F		Air entering outdoor unit temperature °F		Compressor capacity	Heating air volume rate
	Dry bulb	Wet bulb	Dry bulb	Wet bulb		
$H0_1$ Test (required, steady)	70	60 $^{(max)}$	62	56.5	Low	Heating Minimum.[1]
$H1_2$ Test (required, steady)	70	60 $^{(max)}$	47	43	High	Heating Full-Load.[2]
$H1C_2$ Test (optional[8], cyclic)	70	60 $^{(max)}$	47	43	High	(3).
$H1_1$ Test (required)	70	60 $^{(max)}$	47	43	Low	Heating Minimum.[1]
$H1C_1$ Test (optional, cyclic)	70	60 $^{(max)}$	47	43	Low	(4).
$H2_3$ Test (optional, steady)	70	60 $^{(max)}$	35	33	Booster	Heating Full-Load.[2]
$H2_2$ Test (required)	70	60 $^{(max)}$	35	33	High	Heating Full-Load.[2]
$H2_1$ Test (required)	70	60 $^{(max)}$	35	33	Low	Heating Minimum.[1]
$H3_3$ Test (required, steady)	70	60 $^{(max)}$	17	15	Booster	Heating Full-Load.[2]
$H3C_3$ Test[5] [6] (optional, cyclic)	70	60 $^{(max)}$	17	15	Booster	(7).
$H3_2$ Test (required, steady)	70	60 $^{(max)}$	17	15	High	Heating Full-Load.[2]
$H3_1$ Test[5] (required, steady)	70	60 $^{(max)}$	17	15	Low	Heating Minimum.[1]

TABLE 14—HEATING MODE TEST CONDITIONS FOR UNITS WITH A TRIPLE-CAPACITY COMPRESSOR—Continued

Test description	Air entering indoor unit temperature °F		Air entering outdoor unit temperature °F		Compressor capacity	Heating air volume rate
	Dry bulb	Wet bulb	Dry bulb	Wet bulb		
$H4_3$ Test (required, steady)	70	60 (max)	2	1	Booster	Heating Full-Load.[2]

[1] Defined in section 3.1.4.5 of this appendix.

[2] Defined in section 3.1.4.4 of this appendix.

[3] Maintain the airflow nozzle(s) static pressure difference or velocity pressure during the ON period at the same pressure or velocity as measured during the $H1_2$ test.

[4] Maintain the airflow nozzle(s) static pressure difference or velocity pressure during the ON period at the same pressure or velocity as measured during the $H1_1$ test.

[5] Required only if the heat pump's performance when operating at low compressor capacity and outdoor temperatures less than 37 °F is needed to complete the section 4.2.6 HSPF calculations.

[6] If table note [5] applies, the section 3.6.6 equations for $\dot{Q}_h^{k=1}(35)$ and $\dot{E}_h^{k=1}(17)$ may be used in lieu of conducting the $H2_1$ test.

[7] Maintain the airflow nozzle(s) static pressure difference or velocity pressure during the ON period at the same pressure or velocity as measured during the $H3_3$ test.

[8] Required only if the heat pump locks out low capacity operation at lower outdoor temperatures.

3.6.7 Tests for a Heat Pump Having a Single Indoor Unit Having Multiple Indoor Blowers and Offering Two Stages of Compressor Modulation

Conduct the heating mode tests specified in section 3.6.3 of this appendix.

3.7 Test Procedures for Steady-State Maximum Temperature and High Temperature Heating Mode Tests (the $H0_1$, H1, $H1_2$, $H1_1$, and $H1_N$ Tests)

a. For the pretest interval, operate the test room reconditioning apparatus and the heat pump until equilibrium conditions are maintained for at least 30 minutes at the specified section 3.6 test conditions. Use the exhaust fan of the airflow measuring apparatus and, if installed, the indoor blower of the heat pump to obtain and then maintain the indoor air volume rate and/or the external static pressure specified for the particular test. Continuously record the dry-bulb temperature of the air entering the indoor coil, and the dry-bulb temperature and water vapor content of the air entering the outdoor coil. Refer to section 3.11 of this appendix for additional requirements that depend on the selected secondary test method. After satisfying the pretest equilibrium requirements, make the measurements specified in Table 3 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3) for the indoor air enthalpy method and the user-selected secondary method. Make said Table 3 measurements at equal intervals that span 5 minutes or less. Continue data sampling until a 30-minute period (*e.g.,* seven consecutive 5-minute samples) is reached where the test tolerances specified in Table 15 are satisfied. For those continuously recorded parameters, use the entire data set for the 30-minute interval when evaluating Table 15 compliance. Determine the average electrical power consumption of the heat pump over the same 30-minute interval.

TABLE 15—TEST OPERATING AND TEST CONDITION TOLERANCES FOR SECTION 3.7 AND SECTION 3.10 STEADY-STATE HEATING MODE TESTS

	Test operating tolerance[1]	Test condition tolerance[1]
Indoor dry-bulb, °F:		
Entering temperature	2.0	0.5
Leaving temperature	2.0	
Indoor wet-bulb, °F:		
Entering temperature	1.0	
Leaving temperature	1.0	
Outdoor dry-bulb, °F:		
Entering temperature	2.0	0.5
Leaving temperature	[2] 2.0	
Outdoor wet-bulb, °F:		
Entering temperature	1.0	0.3
Leaving temperature	[2] 1.0	
External resistance to airflow, inches of water	0.05	[3] 0.02
Electrical voltage, % of rdg	2.0	1.5
Nozzle pressure drop, % of rdg	2.0	

[1] See section 1.2 of this appendix, Definitions.

[2] Only applies when the Outdoor Air Enthalpy Method is used.

[3] Only applies when testing non-ducted units.

b. Calculate indoor-side total heating capacity as specified in sections 7.3.4.1 and 7.3.4.3 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3). To calculate capacity, use the averages of the measurements (*e.g.* inlet and outlet dry bulb temperatures measured at the psychrometers) that are continuously recorded for the same 30-minute interval used as described above to evaluate compliance with test tolerances. Do not adjust the parameters used in calculating capacity for the permitted variations in test conditions. Assign the average space heating capacity and electrical power over the 30-minute data collection interval to the variables $\dot{Q}_h^k$ and $\dot{E}_h^k(T)$ respectively. The "T" and superscripted "k" are the same as described in section 3.3 of this appendix. Additionally, for the heating mode, use the superscript to denote results from the optional $H1_N$ test, if conducted.

c. For mobile home coil-only system heat pumps, increase $\dot{Q}_h^k(T)$ by

$$\frac{1385\,BTU/h}{1000\,scfm} * \bar{\dot{V}}_s$$

and increase $\dot{E}_h^k(T)$ by,

$$\frac{406\,W}{1000\,scfm} * \bar{\dot{V}}_s$$

where $\bar{\dot{V}}_s$ is the average measured indoor air volume rate expressed in units of cubic feet per minute of standard air (scfm).

For non-mobile home coil-only system heat pumps, increase $\dot{Q}_h^k(T)$ by

$$\frac{1505\,BTU/h}{1000\,scfm} * \bar{\dot{V}}_s$$

and increase $\dot{E}_h^k(T)$ by,

$$\frac{441\,W}{1000\,scfm} * \bar{\dot{V}}_s$$

where $\bar{\dot{V}}_s$ is the average measured indoor air volume rate expressed in units of cubic feet per minute of standard air (scfm). During the 30-minute data collection interval of a high temperature test, pay attention to preventing a defrost cycle. Prior to this time, allow the heat pump to perform a defrost cycle if automatically initiated by its own controls. As in all cases, wait for the heat pump's defrost controls to automatically terminate the defrost cycle. Heat pumps that undergo a defrost should operate in the heating mode for at least 10 minutes after defrost termination prior to beginning the 30-minute data collection interval. For some heat pumps, frost may accumulate on the outdoor coil during a high temperature test. If the indoor coil leaving air temperature or the difference between the leaving and entering air temperatures decreases by more than 1.5 °F over the 30-minute data collection interval, then do not use the collected data to determine capacity. Instead, initiate a defrost cycle. Begin collecting data no sooner than 10 minutes after defrost termination. Collect 30 minutes of new data during which the Table 15 test tolerances are satisfied. In this case, use only the results from the second 30-minute data collection interval to evaluate $\dot{Q}_h^k(47)$ and $\dot{E}_h^k(47)$.

d. If conducting the cyclic heating mode test, which is described in section 3.8 of this appendix, record the average indoor-side air volume rate, $\dot{V}$, specific heat of the air, $C_{p,a}$ (expressed on dry air basis), specific volume of the air at the nozzles, v_n' (or v_n), humidity ratio at the nozzles, W_n, and either pressure difference or velocity pressure for the flow nozzles. If either or both of the below criteria apply, determine the average, steady-state, electrical power consumption of the indoor blower motor ($\dot{E}_{fan,1}$):

(1) The section 3.8 cyclic test will be conducted and the heat pump has a variable-speed indoor blower that is expected to be disabled during the cyclic test; or

(2) The heat pump has a (variable-speed) constant-air volume-rate indoor blower and during the steady-state test the average external static pressure (ΔP_1) exceeds the applicable section 3.1.4.4 minimum (or targeted) external static pressure (ΔP_{min}) by 0.03 inches of water or more.

Determine $\dot{E}_{fan,1}$ by making measurements during the 30-minute data collection interval, or immediately following the test and prior to changing the test conditions. When the above "2" criteria applies, conduct the following four steps after determining $\dot{E}_{fan,1}$ (which corresponds to ΔP_1):

(i) While maintaining the same test conditions, adjust the exhaust fan of the airflow measuring apparatus until the external static pressure increases to approximately $\Delta P_1 + (\Delta P_1 - \Delta P_{min})$.

(ii) After re-establishing steady readings for fan motor power and external static pressure, determine average values for the indoor blower power ($\dot{E}_{fan,2}$) and the external static pressure (ΔP_2) by making measurements over a 5-minute interval.

(iii) Approximate the average power consumption of the indoor blower motor if the 30-minute test had been conducted at ΔP_{min} using linear extrapolation:

$$\dot{E}_{fan,\min} = \frac{\dot{E}_{fan,2} - \dot{E}_{fan,1}}{\Delta P_2 - \Delta P_1}(\Delta P_{\min} - \Delta P_1) + \dot{E}_{fan,1}$$

(iv) Decrease the total space heating capacity, $\dot{Q}_h^k(T)$, by the quantity ($\dot{E}_{fan,1} - \dot{E}_{fan,min}$), when expressed on a Btu/h basis. Decrease the total electrical power, $\dot{E}_h^k(T)$ by the same fan power difference, now expressed in watts.

e. If the temperature sensors used to provide the primary measurement of the indoor-side dry bulb temperature difference during the steady-state dry-coil test and the subsequent cyclic dry-coil test are different, include measurements of the latter sensors among the regularly sampled data. Beginning at the start of the 30-minute data collection period, measure and compute the indoor-side air dry-bulb temperature difference using both sets of instrumentation, ΔT (Set SS) and ΔT (Set CYC), for each equally spaced data sample. If using a consistent data sampling rate that is less than 1 minute, calculate and record minutely averages for the two temperature differences. If using a consistent sampling rate of one minute or more, calculate and record the two temperature differences from each data sample. After having recorded the seventh (i=7) set of temperature differences, calculate the following ratio using the first seven sets of values:

$$F_{CD} = \frac{1}{7}\sum_{i-6}^{i}\frac{\Delta T(Set\ SS)}{\Delta T(Set\ CYC)}$$

Each time a subsequent set of temperature differences is recorded (if sampling more frequently than every 5 minutes), calculate F_{CD} using the most recent seven sets of values. Continue these calculations until the 30-minute period is completed or until a value for F_{CD} is calculated that falls outside the allowable range of 0.94–1.06. If the latter occurs, immediately suspend the test and identify the cause for the disparity in the two temperature difference measurements. Recalibration of one or both sets of instrumentation may be required. If all the values for F_{CD} are within the allowable range, save the final value of the ratio from the 30-minute test as $F_{CD}{}^{*}$. If the temperature sensors used to provide the primary measurement of the indoor-side dry bulb temperature difference during the steady-state dry-coil test and the subsequent cyclic dry-coil test are the same, set $F_{CD}{}^{*} = 1$.

3.8 Test Procedures for the Cyclic Heating Mode Tests (the $H0C_1$, H1C, $H1C_1$ and $H1C_2$ Tests)

a. Except as noted below, conduct the cyclic heating mode test as specified in section 3.5 of this appendix. As adapted to the heating mode, replace section 3.5 references to "the steady-state dry coil test" with "the heating mode steady-state test conducted at the same test conditions as the cyclic heating mode test." Use the test tolerances in Table 16 rather than Table 9. Record the outdoor coil entering wet-bulb temperature according to the requirements given in section 3.5 of this appendix for the outdoor coil entering dry-bulb temperature. Drop the subscript "dry" used in variables cited in section 3.5 of this appendix when referring to quantities from the cyclic heating mode test. If available, use electric resistance heaters (see section 2.1 of this appendix) to minimize the variation in the inlet air temperature. Determine the total space heating delivered during the cyclic heating test, q_{cyc}, as specified in section 3.5 of this appendix except for making the following changes:

(1) When evaluating Equation 3.5–1, use the values of $\dot{V}$, $C_{p,a}$,v_n', (or v_n), and W_n that were recorded during the section 3.7 steady-state test conducted at the same test conditions.

(2) Calculate Γ using,
$\Gamma = F_{CD}{}^{*}\int_{\tau_1}^{\tau_2}[T_{a1}(\tau) - T_{a2}(\tau)]\delta\tau,\ hr \times {}^\circ F,$
where $F_{CD}{}^{*}$ is the value recorded during the section 3.7 steady-state test conducted at the same test condition.

b. For ducted coil-only system heat pumps (excluding the special case where a variable-speed fan is temporarily removed), increase q_{cyc} by the amount calculated using Equation 3.5–3. Additionally, increase e_{cyc} by the amount calculated using Equation 3.5–2. In making these calculations, use the average indoor air volume rate ($\dot{V}_s$) determined from the section 3.7 steady-state heating mode test conducted at the same test conditions.

c. For non-ducted heat pumps, subtract the electrical energy used by the indoor blower during the 3 minutes after compressor cutoff from the non-ducted heat pump's integrated heating capacity, q_{cyc}.

d. If a heat pump defrost cycle is manually or automatically initiated immediately prior to or during the OFF/ON cycling, operate the heat pump continuously until 10 minutes after defrost termination. After that, begin cycling the heat pump immediately or delay until the specified test conditions have been re-established. Pay attention to preventing defrosts after beginning the cycling process. For heat pumps that cycle off the indoor blower during a defrost cycle, make no effort here to restrict the air movement through the indoor coil while the fan is off. Resume the OFF/ON cycling while conducting a minimum of two complete compressor OFF/ON cycles before determining q_{cyc} and e_{cyc}.

3.8.1 Heating Mode Cyclic-Degradation Coefficient Calculation

Use the results from the required cyclic test and the required steady-state test that were conducted at the same test conditions to determine the heating mode cyclic-degradation coefficient $C_D{}^h$. Add "(k=2)" to the coefficient if it corresponds to a two-capacity unit cycling at high capacity. For the below calculation of the heating mode cyclic degradation coefficient, do not include the duct loss correction from section 7.3.3.3 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3) in determining $\dot{Q}_h{}^k(T_{cyc})$ (or q_{cyc}). If the optional cyclic test is conducted but yields a tested $C_D{}^h$ that exceeds the default $C_D{}^h$ or if the optional test is not conducted, assign $C_D{}^h$ the default value of 0.25. The default value for two-capacity units cycling at high capacity, however, is the low-capacity coefficient, *i.e.*, $C_D{}^h$ (k=2) = $C_D{}^h$. The tested $C_D{}^h$ is calculated as follows:

$$C_D^h = \frac{1 - \frac{COP_{cyc}}{COP_{ss}(T_{cyc})}}{1 - HLF}$$

where:

$$COP_{cyc} = \frac{q_{cyc}}{3.413\frac{Btu/h}{W} * e_{cyc}}$$

the average coefficient of performance during the cyclic heating mode test, dimensionless.

$$COP_{ss}(T_{cyc}) = \frac{\dot{Q}_h^k(T_{cyc})}{3.413\frac{Btu/h}{W} * \dot{E}_h^k(T_{cyc})}$$

the average coefficient of performance during the steady-state heating mode test conducted at the same test conditions—*i.e.*, same outdoor dry bulb temperature, T_{cyc}, and speed/capacity, k, if applicable—as specified for the cyclic heating mode test, dimensionless.

$$HLF = \frac{q_{cyc}}{\dot{Q}_h^k(T_{cyc}) * \Delta\tau_{cyc}}$$

the heating load factor, dimensionless.

T_{cyc} = the nominal outdoor temperature at which the cyclic heating mode test is conducted, 62 or 47 °F.

$\Delta\tau_{cyc}$ = the duration of the OFF/ON intervals; 0.5 hours when testing a heat pump having a single-speed or two-capacity compressor and 1.0 hour when testing a heat pump having a variable-speed compressor.

Round the calculated value for C_D^h to the nearest 0.01. If C_D^h is negative, then set it equal to zero.

TABLE 16—TEST OPERATING AND TEST CONDITION TOLERANCES FOR CYCLIC HEATING MODE TESTS

	Test operating tolerance[1]	Test condition tolerance[1]
Indoor entering dry-bulb temperature,[2] °F	2.0	0.5
Indoor entering wet-bulb temperature,[2] °F	1.0	
Outdoor entering dry-bulb temperature,[2] °F	2.0	0.5
Outdoor entering wet-bulb temperature,[2] °F	2.0	1.0
External resistance to air-flow,[2] inches of water	0.05	
Airflow nozzle pressure difference or velocity pressure,[2]% of reading	2.0	[3]2.0
Electrical voltage,[4]% of rdg	2.0	1.5

[1] See section 1.2 of this appendix, Definitions.

[2] Applies during the interval that air flows through the indoor (outdoor) coil except for the first 30 seconds after flow initiation. For units having a variable-speed indoor blower that ramps, the tolerances listed for the external resistance to airflow shall apply from 30 seconds after achieving full speed until ramp down begins.

[3] The test condition must be the average nozzle pressure difference or velocity pressure measured during the steady-state test conducted at the same test conditions.

[4] Applies during the interval that at least one of the following—the compressor, the outdoor fan, or, if applicable, the indoor blower—are operating, except for the first 30 seconds after compressor start-up.

3.9 Test Procedures for Frost Accumulation Heating Mode Tests (the H2, $H2_2$, $H2_V$, and $H2_1$ Tests)

a. Confirm that the defrost controls of the heat pump are set as specified in section 2.2.1 of this appendix. Operate the test room reconditioning apparatus and the heat pump for at least 30 minutes at the specified section 3.6 test conditions before starting the "preliminary" test period. The preliminary test period must immediately precede the "official" test period, which is the heating and defrost interval over which data are collected for evaluating average space heating capacity and average electrical power consumption.

b. For heat pumps containing defrost controls which are likely to cause defrosts at intervals less than one hour, the preliminary test period starts at the termination of an automatic defrost cycle and ends at the termination of the next occurring automatic defrost cycle. For heat pumps containing defrost controls which are likely to cause defrosts at intervals exceeding one hour, the preliminary test period must consist of a heating interval lasting at least one hour followed by a defrost cycle that is either manually or automatically initiated. In all cases, the heat pump's own controls must govern when a defrost cycle terminates.

c. The official test period begins when the preliminary test period ends, at defrost termination. The official test period ends at the termination of the next occurring automatic defrost cycle. When testing a heat pump that uses a time-adaptive defrost control system (see section 1.2 of this appendix, Definitions), however, manually initiate the defrost cycle that ends the official test period at the instant indicated by instructions provided by the manufacturer. If the heat pump has not undergone a defrost after 6 hours, immediately conclude the test and use the results from the full 6-hour period to calculate the average space heating capacity and average electrical power consumption.

For heat pumps that turn the indoor blower off during the defrost cycle, take steps to cease forced airflow through the indoor coil and block the outlet duct whenever the heat pump's controls cycle off the indoor blower. If it is installed, use the outlet damper box described in section 2.5.4.1 of this appendix to affect the blocked outlet duct.

d. Defrost termination occurs when the controls of the heat pump actuate the first change in converting from defrost operation to normal heating operation. Defrost initiation occurs when the controls of the heat pump first alter its normal heating operation in order to eliminate possible accumulations of frost on the outdoor coil.

e. To constitute a valid frost accumulation test, satisfy the test tolerances specified in Table 17 during both the preliminary and official test periods. As noted in Table 17, test operating tolerances are specified for two sub-intervals: (1) When heating, except for the first 10 minutes after the termination of a defrost cycle (sub-interval H, as described in Table 17) and (2) when defrosting, plus these same first 10 minutes after defrost termination (sub-interval D, as described in Table 17). Evaluate compliance with Table 17 test condition tolerances and the majority of the test operating tolerances using the averages from measurements recorded only during sub-interval H. Continuously record the dry bulb temperature of the air entering the indoor coil, and the dry bulb temperature and water vapor content of the air entering the outdoor coil. Sample the remaining parameters listed in Table 17 at equal intervals that span 5 minutes or less.

f. For the official test period, collect and use the following data to calculate average space heating capacity and electrical power. During heating and defrosting intervals when the controls of the heat pump have the indoor blower on, continuously record the dry-bulb temperature of the air entering (as noted above) and leaving the indoor coil. If using a thermopile, continuously record the difference between the leaving and entering dry-bulb temperatures during the interval(s) that air flows through the indoor coil. For coil-only system heat pumps, determine the corresponding cumulative time (in hours) of indoor coil airflow, $\Delta\tau_a$. Sample measurements used in calculating the air volume rate (refer to sections 7.7.2.1 and 7.7.2.2 of ANSI/ASHRAE 37–2009) at equal intervals that span 10 minutes or less. (Note: In the first printing of ANSI/ASHRAE 37–2009, the second IP equation for Q_{mi} should read:) Record the electrical energy consumed, expressed in watt-hours, from defrost termination to defrost termination, $e_{DEF}^k(35)$, as well as the corresponding elapsed time in hours, $\Delta\tau_{FR}$.

TABLE 17—TEST OPERATING AND TEST CONDITION TOLERANCES FOR FROST ACCUMULATION HEATING MODE TESTS

	Test operating tolerance[1]		Test condition tolerance[1]
	Sub-interval H[2]	Sub-interval D[3]	Sub-interval H[2]
Indoor entering dry-bulb temperature, °F	2.0	[4]4.0	0.5
Indoor entering wet-bulb temperature, °F	1.0		
Outdoor entering dry-bulb temperature, °F	2.0	10.0	1.0

TABLE 17—TEST OPERATING AND TEST CONDITION TOLERANCES FOR FROST ACCUMULATION HEATING MODE TESTS—Continued

	Test operating tolerance[1]		Test condition tolerance[1] Sub-interval H[2]
	Sub-interval H[2]	Sub-interval D[3]	
Outdoor entering wet-bulb temperature, °F	1.5	....	0.5
External resistance to airflow, inches of water	0.05	....	[5] 0.02
Electrical voltage, % of rdg	2.0	....	1.5

[1] See section 1.2 of this appendix, Definitions.

[2] Applies when the heat pump is in the heating mode, except for the first 10 minutes after termination of a defrost cycle.

[3] Applies during a defrost cycle and during the first 10 minutes after the termination of a defrost cycle when the heat pump is operating in the heating mode.

[4] For heat pumps that turn off the indoor blower during the defrost cycle, the noted tolerance only applies during the 10 minute interval that follows defrost termination.

[5] Only applies when testing non-ducted heat pumps.

3.9.1 Average Space Heating Capacity and Electrical Power Calculations

a. Evaluate average space heating capacity, $\dot{Q}_h^k(35)$, when expressed in units of Btu per hour, using:

$$\dot{Q}_h^k(35) = \frac{60 * \bar{\dot{V}} * C_{p,a} * \Gamma}{\Delta\tau_{FR}\left[\nu_n' * (1 + W_n)\right]} = \frac{60 * \bar{\dot{V}} * C_{p,a} * \Gamma}{\Delta\tau_{FR}\nu_n}$$

Where,

$\bar{\dot{V}}$ = the average indoor air volume rate measured during sub-interval H, cfm.

$C_{p,a} = 0.24 + 0.444 \cdot W_n$, the constant pressure specific heat of the air-water vapor mixture that flows through the indoor coil and is expressed on a dry air basis, Btu/lbm_{da} · °F.

v_n' = specific volume of the air-water vapor mixture at the nozzle, ft^3/lbm_{mx}.

W_n = humidity ratio of the air-water vapor mixture at the nozzle, lbm of water vapor per lbm of dry air.

$\Delta\tau_{FR} = \tau_2 - \tau_1$, the elapsed time from defrost termination to defrost termination, hr.

$\Gamma = \int^{\text{tau;2}}\tau_1[T_{a2}(\tau) - T_{a1}(\tau)]d\tau, hr * °F$

$T_{a1}(\tau)$ = dry bulb temperature of the air entering the indoor coil at elapsed time τ, °F; only recorded when indoor coil airflow occurs; assigned the value of zero during periods (if any) where the indoor blower cycles off.

$T_{a2}(\tau)$ = dry bulb temperature of the air leaving the indoor coil at elapsed time τ, °F; only recorded when indoor coil airflow occurs; assigned the value of zero during periods (if any) where the indoor blower cycles off.

τ_1 = the elapsed time when the defrost termination occurs that begins the official test period, hr.

τ_2 = the elapsed time when the next automatically occurring defrost termination occurs, thus ending the official test period, hr.

v_n = specific volume of the dry air portion of the mixture evaluated at the dry-bulb temperature, vapor content, and barometric pressure existing at the nozzle, ft³ per lbm of dry air.

To account for the effect of duct losses between the outlet of the indoor unit and the section 2.5.4 dry-bulb temperature grid, adjust $\dot{Q}_h^k(35)$ in accordance with section 7.3.4.3 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3).

b. Evaluate average electrical power, $\dot{E}_h^k(35)$, when expressed in units of watts, using:

$$\dot{E}_h^k(35) = \frac{e_{def}(35)}{\Delta\,\tau_{FR}}$$

For mobile home coil-only system heat pumps, increase $\dot{Q}_h^k(35)$ by

$$\frac{1385\,BTU/h}{1000\,scfm} * \bar{\dot{V}}_s$$

and increase $\dot{E}_h^k(35)$ by,

$$\frac{406\,W}{1000\,scfm} * \bar{\dot{V}}_s$$

where $\bar{\dot{V}}_s$ is the average measured indoor air volume rate expressed in units of cubic feet per minute of standard air (scfm). .

For non-mobile home coil-only system heat pumps, increase $\dot{Q}_h^k(35)$ by

$$\frac{1505\,BTU/h}{1000\,scfm} * \bar{\dot{V}}_s$$

and increase $\dot{E}_h^k(35)$ by,

$$\frac{441\,W}{1000\,scfm} * \bar{\dot{V}}_s$$

where $\bar{\dot{V}}_s$ is the average measured indoor air volume rate expressed in units of cubic feet per minute of standard air (scfm).

c. For heat pumps having a constant-air-volume-rate indoor blower, the five additional steps listed below are required if the average of the external static pressures measured during sub-interval H exceeds the applicable section 3.1.4.4, 3.1.4.5, or 3.1.4.6 minimum (or targeted) external static pressure (ΔP_{min}) by 0.03 inches of water or more:

(1) Measure the average power consumption of the indoor blower motor ($\dot{E}_{fan,1}$) and record the corresponding external static pressure (ΔP_1) during or immediately following the frost accumulation heating mode test. Make the measurement at a time when the heat pump is heating, except for the first 10 minutes after the termination of a defrost cycle..

(2) After the frost accumulation heating mode test is completed and while maintaining the same test conditions, adjust the exhaust fan of the airflow measuring apparatus until the external static pressure increases to approximately $\Delta P_1 + (\Delta P_1 - \Delta P_{min})$.

(3) After re-establishing steady readings for the fan motor power and external static pressure, determine average values for the indoor blower power ($\dot{E}_{fan,2}$) and the external static pressure (ΔP_2) by making measurements over a 5-minute interval.

(4) Approximate the average power consumption of the indoor blower motor had the frost accumulation heating mode test been conducted at ΔP_{min} using linear extrapolation:

$$\dot{E}_{fan,\min} = \frac{\dot{E}_{fan,2} - \dot{E}_{fan,1}}{\Delta P_2 - \Delta P_1}(\Delta P_{\min} - \Delta P_1) + \dot{E}_{fan,1}$$

(5) Decrease the total heating capacity, $\dot{Q}_h^k(35)$, by the quantity $[(\dot{E}_{fan,1} - \dot{E}_{fan,min})\cdot(\Delta\tau_a/\Delta\tau_{FR}]$, when expressed on a Btu/h basis. Decrease the total electrical power, $E_h^k(35)$, by the same quantity, now expressed in watts.

3.9.2 Demand Defrost Credit

a. Assign the demand defrost credit, F_{def}, that is used in section 4.2 of this appendix to the value of 1 in all cases except for heat pumps having a demand-defrost control system (see section 1.2 of this appendix, Definitions). For such qualifying heat pumps, evaluate F_{def} using,

$$F_{def} = 1 + 0.03 * \left[1 - \frac{\Delta\tau_{def} - 1.5}{\Delta\tau_{\max} - 1.5}\right]$$

Where:

$\Delta\tau_{def}$ = the time between defrost terminations (in hours) or 1.5, whichever is greater. Assign a value of 6 to $\Delta\tau_{def}$ if this limit is reached during a frost accumulation test and the heat pump has not completed a defrost cycle.

$\Delta\tau_{max}$ = maximum time between defrosts as allowed by the controls (in hours) or 12, whichever is less, as provided in the certification report.

b. For two-capacity heat pumps and for section 3.6.2 units, evaluate the above equation using the $\Delta\tau_{def}$ that applies based on the frost accumulation test conducted at high capacity and/or at the heating full-load air volume rate. For variable-speed heat pumps, evaluate $\Delta\tau_{def}$ based on the required frost accumulation test conducted at the intermediate compressor speed.

3.10 Test Procedures for Steady-State Low Temperature and Very Low Temperature Heating Mode Tests (the H3, $H3_2$, $H3_1$, $H3_3$, $H4_3$, and $H4_2$ Tests)

Except for the modifications noted in this section, conduct the low temperature and very low temperature heating mode tests using the same approach as specified in section 3.7 of this appendix for the maximum and high temperature tests. After satisfying the section 3.7 requirements for the pretest interval but before beginning to collect data to determine the capacity and power input, conduct a defrost cycle. This defrost cycle may be manually or automatically initiated. Terminate the defrost sequence using the heat pump's defrost controls. Begin the 30-minute data collection interval described in section 3.7 of this appendix, from which the capacity and power input are determined, no sooner than 10 minutes after defrost termination. Defrosts should be prevented over the 30-minute data collection interval.

3.11 Additional Requirements for the Secondary Test Methods

3.11.1 If Using the Outdoor Air Enthalpy Method as the Secondary Test Method

a. For all cooling mode and heating mode tests, first conduct a test without the outdoor air-side test apparatus described in section 2.10.1 connected to the outdoor unit ("non-ducted" test).

b. For the first section 3.2 steady-state cooling mode test and the first section 3.6 steady-state heating mode test, conduct a second test in which the outdoor-side apparatus is connected ("ducted" test). No other cooling mode or heating mode tests require the ducted test so long as the unit operates the outdoor fan during all cooling mode steady-state tests at the same speed and all heating mode steady-state tests at the same speed. If using more than one outdoor fan speed for the cooling mode steady-state tests, however, conduct the ducted test for each cooling mode test where a different fan speed is first used. This same requirement applies for the heating mode tests.

3.11.1.3 Non-Ducted Test

a. For the non-ducted test, connect the indoor air-side test apparatus to the indoor coil; do not connect the outdoor air-side test apparatus. Allow the test room reconditioning apparatus and the unit being tested to operate for at least one hour. After attaining equilibrium conditions, measure the following quantities at equal intervals that span 5 minutes or less:

(1) The section 2.10.1 evaporator and condenser temperatures or pressures;

(2) Parameters required according to the Indoor Air Enthalpy Method.

Continue these measurements until a 30-minute period (*e.g.,* seven consecutive 5-minute samples) is obtained where the Table 8 or Table 15, whichever applies, test tolerances are satisfied.

b. For cases where a ducted test is not required per section 3.11.1.b of this appendix, the non-ducted test constitutes the "official" test for which validity is not based on comparison with a secondary test.

c. For cases where a ducted test is required per section 3.11.1.b of this appendix, the following conditions must be met for the non-ducted test to constitute a valid "official" test:

(1) The energy balance specified in section 3.1.1 is achieved for the ducted test (*i.e.,* compare the capacities determined using the indoor air enthalpy method and the outdoor air enthalpy method).

(2) The capacities determined using the indoor air enthalpy method from the ducted and non-ducted tests must agree within 2.0 percent.

3.11.1.4 Ducted Test

a. The test conditions and tolerances for the ducted test are the same as specified for the official test.

b. After collecting 30 minutes of steady-state data during the non-ducted test, connect the outdoor air-side test apparatus to the unit for the ducted test. Adjust the exhaust fan of the outdoor airflow measuring apparatus until averages for the evaporator and condenser temperatures, or the saturated temperatures corresponding to the measured pressures, agree within ±0.5 °F of the averages achieved during the non-ducted test. Calculate the averages for the ducted test using five or more consecutive readings taken at one minute intervals. Make these consecutive readings after re-establishing equilibrium conditions.

c. During the ducted test, at one minute intervals, measure the parameters required according to the indoor air enthalpy method and the outdoor air enthalpy method.

d. For cooling mode ducted tests, calculate capacity based on outdoor air-enthalpy measurements as specified in sections 7.3.3.2 and 7.3.3.3 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3). For heating mode ducted tests, calculate heating capacity based on outdoor air-enthalpy measurements as specified in sections 7.3.4.2 and 7.3.3.4.3 of the same ANSI/ASHRAE Standard. Adjust the outdoor-side capacity according to section 7.3.3.4 of ANSI/ASHRAE 37–2009 to account for line losses when testing split systems.

3.11.2 If Using the Compressor Calibration Method as the Secondary Test Method

a. Conduct separate calibration tests using a calorimeter to determine the refrigerant flow rate. Or for cases where the superheat of the refrigerant leaving the evaporator is less than 5 °F, use the calorimeter to measure total capacity rather than refrigerant flow rate. Conduct these calibration tests at the same test conditions as specified for the tests in this appendix. Operate the unit for at least one hour or until obtaining equilibrium conditions before collecting data that will be used in determining the average refrigerant flow rate or total capacity. Sample the data at equal intervals that span 5 minutes or less. Determine average flow rate or average capacity from data sampled over a 30-minute period where the Table 8 (cooling) or the Table 15 (heating) tolerances are satisfied. Otherwise, conduct the calibration tests according to sections 5, 6, 7, and 8 of ASHRAE 23.1–2010 (incorporated by reference, see § 430.3); sections 5, 6, 7, 8, 9, and 11 of ASHRAE 41.9–2011 (incorporated by reference, see § 430.3); and section 7.4 of ANSI/ASHRAE 37–2009 (incorporated by reference, see § 430.3).

b. Calculate space cooling and space heating capacities using the compressor calibration method measurements as specified in section 7.4.5 and 7.4.6 respectively, of ANSI/ASHRAE 37–2009.

3.11.3 If Using the Refrigerant-Enthalpy Method as the Secondary Test Method

Conduct this secondary method according to section 7.5 of ANSI/ASHRAE 37–2009. Calculate space cooling and heating capacities using the refrigerant-enthalpy method measurements as specified in sections 7.5.4 and 7.5.5, respectively, of the same ASHRAE Standard.

3.12 Rounding of Space Conditioning Capacities for Reporting Purposes

a. When reporting rated capacities, round them off as specified in § 430.23 (for a single unit) and in 10 CFR 429.16 (for a sample).

b. For the capacities used to perform the calculations in section 4 of this appendix, however, round only to the nearest integer.

3.13 Laboratory Testing To Determine Off Mode Average Power Ratings

Voltage tolerances: As a percentage of reading, test operating tolerance must be 2.0 percent and test condition tolerance must be 1.5 percent (see section 1.2 of this appendix for definitions of these tolerances).

Conduct one of the following tests: If the central air conditioner or heat pump lacks a compressor crankcase heater, perform the test in section 3.13.1 of this appendix; if the central air conditioner or heat pump has a compressor crankcase heater that lacks controls and is not self-regulating, perform the test in section 3.13.1 of this appendix; if the central air conditioner or heat pump has a crankcase heater with a fixed power input controlled with a thermostat that measures ambient temperature and whose sensing element temperature is not affected by the heater, perform the test in section 3.13.1 of this appendix; if the central air conditioner or heat pump has a compressor crankcase heater equipped with self-regulating control or with controls for which the sensing element temperature is affected by the heater, perform the test in section 3.13.2 of this appendix.

3.13.1 This test determines the off mode average power rating for central air conditioners and heat pumps that lack a compressor crankcase heater, or have a compressor crankcase heating system that can be tested without control of ambient temperature during the test. This test has no ambient condition requirements.

a. Test Sample Set-up and Power Measurement: For coil-only systems, provide a furnace or modular blower that is compatible with the system to serve as an interface with the thermostat (if used for the test) and to provide low-voltage control circuit power. Make all control circuit connections between the furnace (or modular blower) and the outdoor unit as specified by the manufacturer's installation instructions. Measure power supplied to both the furnace or modular blower and power supplied to the outdoor unit. Alternatively, provide a compatible transformer to supply low-voltage control circuit power, as described in section 2.2.d of this appendix. Measure transformer power, either supplied to the primary winding or supplied by the secondary winding of the transformer, and power supplied to the outdoor unit. For blower coil and single-package systems, make all control circuit connections between components as specified by the manufacturer's installation instructions, and provide power and measure power supplied to all system components.

b. Configure Controls: Configure the controls of the central air conditioner or heat pump so that it operates as if connected to a building thermostat that is set to the OFF position. Use a compatible building thermostat if necessary to achieve this configuration. For a thermostat-controlled crankcase heater with a fixed power input, bypass the crankcase heater thermostat if necessary to energize the heater.

c. Measure $P2_x$: If the unit has a crankcase heater time delay, make sure that time-delay function is disabled or wait until delay time has passed. Determine the average power from non-zero value data measured over a 5-minute interval of the non-operating central air conditioner or heat pump and designate the average power as $P2_x$, the heating season total off mode power.

d. Measure P_x for coil-only split systems and for blower coil split systems for which a furnace or a modular blower is the designated air mover: Disconnect all low-voltage wiring for the *outdoor* components and *outdoor* controls from the low-voltage transformer. Determine the average power from non-zero value data measured over a 5-minute interval of the power supplied to the (remaining) low-voltage components of the central air conditioner or heat pump, or low-voltage power, P_x. This power measurement does not include line power supplied to the outdoor unit. It is the line power supplied to the air mover, or, if a compatible transformer is used instead of an air mover, it is the line power supplied to the transformer primary coil. If a compatible transformer is used instead of an air mover and power output of the low-voltage secondary circuit is measured, P_x is zero.

e. Calculate *P2:* Set the number of compressors equal to the unit's number of single-stage compressors plus 1.75 times the unit's number of compressors that are not single-stage.

For single-package systems and blower coil split systems for which the designated air mover is not a furnace or modular blower, divide the heating season total off mode power ($P2_x$) by the number of compressors to calculate *P2,* the heating season per-compressor off mode power. Round *P2* to the nearest watt. The expression for calculating *P2* is as follows:

$$P2 = \frac{P2_x}{number\ of\ compressors}.$$

For coil-only split systems and blower coil split systems for which a furnace or a modular blower is the designated air mover, subtract the low-voltage power (P_x) from the heating season total off mode power ($P2_x$) and divide by the number of compressors to calculate *P2,* the heating season per-compressor off mode power. Round *P2* to the nearest watt. The expression for calculating *P2* is as follows:

$$P2 = \frac{P2_x - P_x}{number\ of\ compressors}.$$

f. Shoulder-season per-compressor off mode power, *P1*: If the system does not have a crankcase heater, has a crankcase heater without controls that is not self-regulating, or has a value for the crankcase heater turn-on temperature (as certified to DOE) that is higher than 71 °F, *P1* is equal to *P2.*

Otherwise, de-energize the crankcase heater (by removing the thermostat bypass or otherwise disconnecting only the power supply to the crankcase heater) and repeat the measurement as described in section 3.13.1.c of this appendix. Designate the measured average power as $P1_x$, the shoulder season total off mode power.

Determine the number of compressors as described in section 3.13.1.e of this appendix.

For single-package systems and blower coil systems for which the designated air mover is not a furnace or modular blower, divide the shoulder season total off mode power ($P1_x$) by the number of compressors to calculate *P1,* the shoulder season per-compressor off mode power. Round *P1* to the nearest watt. The expression for calculating *P1* is as follows:

$$P1 = \frac{P1_x}{number\ of\ compressors}.$$

For coil-only split systems and blower coil split systems for which a furnace or a modular blower is the designated air mover, subtract the low-voltage power (P_x) from the shoulder season total off mode power ($P1_x$) and divide by the number of compressors to calculate *P1,* the shoulder season per-compressor off mode power. Round *P1* to the nearest watt. The expression for calculating *P1* is as follows:

$$P1 = \frac{P1_x - P_x}{number\ of\ compressors}.$$

3.13.2 This test determines the off mode average power rating for central air conditioners and heat pumps for which ambient temperature can affect the measurement of crankcase heater power.

a. Test Sample Set-up and Power Measurement: set up the test and measurement as described in section 3.13.1.a of this appendix.

b. Configure Controls: Position a temperature sensor to measure the outdoor dry-bulb temperature in the air between 2 and 6 inches from the crankcase heater control temperature sensor or, if no such temperature sensor exists, position it in the air between 2 and 6 inches from the crankcase heater. Utilize the temperature measurements from this sensor for this portion of the test procedure. Configure the controls of the central air conditioner or heat pump so that it operates as if connected to a building thermostat that is set to the OFF position. Use a compatible building thermostat if necessary to achieve this configuration.

Conduct the test after completion of the B, B_1, or B_2 test. Alternatively, start the test when the outdoor dry-bulb temperature is at 82 °F and the temperature of the compressor shell (or temperature of each compressor's shell if there is more than one compressor) is at least 81 °F. Then adjust the outdoor temperature and achieve an outdoor dry-bulb temperature of 72 °F. If the unit's compressor has no sound blanket, wait at least 4 hours after the outdoor temperature reaches 72 °F. Otherwise, wait at least 8 hours after the outdoor temperature reaches 72 °F. Maintain this temperature within +/− 2 °F while the compressor temperature equilibrates and while making the power measurement, as described in section 3.13.2.c of this appendix.

c. Measure $P1_x$: If the unit has a crankcase heater time delay, make sure that time-delay function is disabled or wait until delay time has passed. Determine the average power from non-zero value data measured over a 5-minute interval of the non-operating central air conditioner or heat pump and designate the average power as $P1_x$, the shoulder season total off mode power. For units with crankcase heaters which operate during this part of the test and whose controls cycle or vary crankcase heater power over time, the test period shall consist of three complete crankcase heater cycles or 18 hours, whichever comes first. Designate the average power over the test period as $P1_x$, the shoulder season total off mode power.

d. Reduce outdoor temperature: Approach the target outdoor dry-bulb temperature by adjusting the outdoor temperature. This target temperature is five degrees Fahrenheit less than the temperature certified by the manufacturer as the temperature at which the crankcase heater turns on. If the unit's compressor has no sound blanket, wait at least 4 hours after the outdoor temperature reaches the target temperature. Otherwise, wait at least 8 hours after the outdoor temperature reaches the target temperature. Maintain the target temperature within +/-2 °F while the compressor temperature equilibrates and while making the power measurement, as described in section 3.13.2.e of this appendix.

e. Measure $P2_x$: If the unit has a crankcase heater time delay, make sure that time-delay function is disabled or wait until delay time has passed. Determine the average non-zero power of the non-operating central air conditioner or heat pump over a 5-minute interval and designate it as $P2_x$, the heating season total off mode power. For units with crankcase heaters whose controls cycle or vary crankcase heater power over time, the test period shall consist of three complete crankcase heater cycles or 18 hours, whichever comes first. Designate the average power over the test period as $P2_x$, the heating season total off mode power.

f. Measure P_x for coil-only split systems and for blower coil split systems for which a furnace or modular blower is the designated air mover: Disconnect all low-voltage wiring for the *outdoor* components and *outdoor* controls from the low-voltage transformer. Determine the average power from non-zero value data measured over a 5-minute interval of the power supplied to the (remaining) low-voltage components of the central air conditioner or heat pump, or low-voltage power, P_x. This power measurement does not include line power supplied to the outdoor unit. It is the line power supplied to the air mover, or, if a compatible transformer is used instead of an air mover, it is the line power supplied to the transformer primary coil. If a compatible transformer is used instead of an air mover and power output of the low-voltage secondary circuit is measured, P_x is zero.

g. Calculate *P1*:

Set the number of compressors equal to the unit's number of single-stage compressors plus 1.75 times the unit's number of compressors that are not single-stage.

For single-package systems and blower coil split systems for which the air mover is not a furnace or modular blower, divide the shoulder season total off mode power ($P1_x$) by the number of compressors to calculate *P1*, the shoulder season per-compressor off mode power. Round to the nearest watt. The expression for calculating *P1* is as follows:

$$P1 = \frac{P1_x}{number\ of\ compressors}.$$

For coil-only split systems and blower coil split systems for which a furnace or a modular blower is the designated air mover, subtract the low-voltage power (P_x) from the shoulder season total off mode power ($P1_x$) and divide by the number of compressors to calculate *P1*, the shoulder season per-compressor off mode power. Round to the nearest watt. The expression for calculating *P1* is as follows:

$$P1 = \frac{P1_x - P_x}{number\ of\ compressors}.$$

h. Calculate *P2*:

Determine the number of compressors as described in section 3.13.2.g of this appendix.

For, single-package systems and blower coil split systems for which the air mover is not a furnace, divide the heating season total off mode power ($P2_x$) by the number of compressors to calculate *P2*, the heating season per-compressor off mode power. Round to the nearest watt. The expression for calculating *P2* is as follows:

$$P2 = \frac{P2_x}{number\ of\ compressors}.$$

For coil-only split systems and blower coil split systems for which a furnace or a modular blower is the designated air mover, subtract the low-voltage power (P_x) from the heating season total off mode power ($P2_x$) and divide by the number of compressors to calculate *P2*, the heating season per-compressor off mode power. Round to the nearest watt. The expression for calculating *P2* is as follows:

$$P2 = \frac{P2_x - P_x}{number\ of\ compressors}.$$

4. Calculations of Seasonal Performance Descriptors

4.1 Seasonal Energy Efficiency Ratio (SEER) Calculations. Calculate SEER as follows: For equipment covered under sections 4.1.2, 4.1.3, and 4.1.4 of this appendix, evaluate the seasonal energy efficiency ratio,

$$\text{Equation 4.1-1 } SEER = \frac{\sum_{j=1}^{8} q_c(T_j)}{\sum_{j=1}^{8} e_c(T_j)} = \frac{\sum_{j=1}^{8} \frac{q_c(T_j)}{N}}{\sum_{j=1}^{8} \frac{e_c(T_j)}{N}}$$

where,

$\frac{q_c(T_j)}{N}$ = the ratio of the total space cooling provided during periods of the space cooling season when the outdoor temperature fell within the range represented by bin temperature T_j to the total number of hours in the cooling season (N), Btu/h.

$\frac{e_c(T_j)}{N}$ = the electrical energy consumed by the test unit during periods of the space cooling season when the outdoor temperature fell within the range represented by bin temperature T_j to the total number of hours in the cooling season (N), W.

T_j = the outdoor bin temperature, °F. Outdoor temperatures are grouped or "binned." Use bins of 5 °F with the 8 cooling season bin temperatures being 67, 72, 77, 82, 87, 92, 97, and 102 °F.

j = the bin number. For cooling season calculations, j ranges from 1 to 8.

Additionally, for sections 4.1.2, 4.1.3, and 4.1.4 of this appendix, use a building cooling load, $BL(T_j)$. When referenced, evaluate $BL(T_j)$ for cooling using,

$$\text{Equation 4.1-2 } BL(T_j) = \frac{(T_j - 65)}{95 - 65} * \frac{\dot{Q}_c^{k=2}(95)}{1.1} * V$$

Where,

$\dot{Q}_c^{k=2}(95)$ = the space cooling capacity determined from the A_2 test and calculated as specified in section 3.3 of this appendix, Btu/h.

1.1 = sizing factor, dimensionless.

The temperatures 95 °F and 65 °F in the building load equation represent the selected outdoor design temperature and the zero-load base temperature, respectively.

V is a factor equal to 0.93 for variable-speed heat pumps and otherwise equal to 1.0.

4.1.1 SEER Calculations for a Blower Coil System Having a Single-Speed Compressor and Either a Fixed-Speed Indoor Blower or a Constant-Air-Volume-Rate Indoor Blower, or a Coil-Only System Air Conditioner or Heat Pump

a. Evaluate the seasonal energy efficiency ratio, expressed in units of Btu/watt-hour, using:

$$SEER = PLF(0.5) * EER_B$$

Where:

$$EER_B = \frac{\dot{Q}_c(82)}{\dot{E}_c(82)}$$ = the energy efficiency ratio determined from the B test described in sections 3.2.1, 3.1.4.1, and 3.3 of this appendix, Btu/h per watt.

$PLF(0.5) = 1 - 0.5 \cdot C_D^c$, the part-load performance factor evaluated at a cooling load factor of 0.5, dimensionless.

b. Refer to section 3.3 of this appendix regarding the definition and calculation of $\dot{Q}_c(82)$ and $\dot{E}_c(82)$. Evaluate the cooling mode cyclic degradation factor C_D^c as specified in section 3.5.3 of this appendix.

4.1.2 SEER Calculations for an Air Conditioner or Heat Pump Having a Single-Speed Compressor and a Variable-Speed Variable-Air-Volume-Rate Indoor Blower

4.1.2.1 Units Covered by Section 3.2.2.1 of This Appendix Where Indoor Blower Capacity Modulation Correlates With the Outdoor Dry Bulb Temperature. The manufacturer must provide information on how the indoor air volume rate or the indoor blower speed varies over the outdoor temperature range of 67 °F to 102 °F. Calculate SEER using Equation 4.1–1. Evaluate the quantity $q_c(T_j)/N$ in Equation 4.1–1 using,

$$\text{Equation 4.1.2-1} \quad \frac{q_c(T_j)}{N} = X(T_j) * \dot{Q}_c(T_j) * \frac{n_j}{N}$$

where:

$$X(T_j) = \begin{Bmatrix} BL(T_j)/\dot{Q}_c(T_j) \\ or \\ 1 \end{Bmatrix}$$ whichever is less; the cooling mode load factor for temperature bin j, dimensionless.

$\dot{Q}_c(T_j)$ = the space cooling capacity of the test unit when operating at outdoor temperature, T_j, Btu/h.

n_j/N = fractional bin hours for the cooling season; the ratio of the number of hours during the cooling season when the outdoor temperature fell within the range represented by bin temperature T_j to the total number of hours in the cooling season, dimensionless.

a. For the space cooling season, assign n_j/N as specified in Table 18. Use Equation 4.1–2 to calculate the building load, $BL(T_j)$. Evaluate $\dot{Q}_c(T_j)$ using, Equation 4.1.2-2 $\dot{Q}_c(T_j) = \dot{Q}_c^{k=1}(T_j) + \frac{\dot{Q}_c^{k=2}(T_j)-\dot{Q}_c^{k=1}(T_j)}{\mathrm{FP}_c^{k=2}-\mathrm{FP}_c^{k=1}} * [\mathrm{FP}_c(T_j) - \mathrm{FP}_c^{k=1}]$

where:

$$\dot{Q}_c^{k=1}(T_j) = \dot{Q}_c^{k=1}(82) + \frac{\dot{Q}_c^{k=1}(95) - \dot{Q}_c^{k=1}(82)}{95-82} * (T_j - 82)$$

the space cooling capacity of the test unit at outdoor temperature T_j if operated at the cooling minimum air volume rate, Btu/h.

$$\dot{Q}_c^{k=2}(T_j) = \dot{Q}_c^{k=2}(82) + \frac{\dot{Q}_c^{k=2}(95) - \dot{Q}_c^{k=2}(82)}{95-82} * (T_j - 82)$$

the space cooling capacity of the test unit at outdoor temperature T_j if operated at the Cooling full-load air volume rate, Btu/h.

b. For units where indoor blower speed is the primary control variable, $\mathrm{FP}_c^{k=1}$ denotes the fan speed used during the required A_1 and B_1 tests (see section 3.2.2.1 of this appendix), $\mathrm{FP}_c^{k=2}$ denotes the fan speed used during the required A_2 and B_2 tests, and $\mathrm{FP}_c(T_j)$ denotes the fan speed used by the unit when the outdoor temperature equals T_j. For units where indoor air volume rate is the primary control variable, the three FP_c's are similarly defined only now being expressed in terms of air volume rates rather than fan speeds. Refer to sections 3.2.2.1, 3.1.4 to 3.1.4.2, and 3.3 of this appendix regarding the definitions and calculations of $\dot{Q}_c^{k=1}(82)$, $\dot{Q}_c^{k=1}(95)$, $\dot{Q}_c^{k=2}(82)$, and $\dot{Q}_c^{k=2}(95)$.

Calculate $e_c(T_j)/N$ in Equation 4.1-1 using, Equation 4.1.2-3 $\frac{e_c(T_j)}{N} = \frac{X(T_j) * \dot{E}_c(T_j)}{PLF_j} * \frac{n_j}{N}$

Where:

$PLF_j = 1 - C_D^c \cdot [1 - X(T_j)]$, the part load factor, dimensionless.

$\dot{E}_c(T_j)$ = the electrical power consumption of the test unit when operating at outdoor temperature T_j, W.

c. The quantities $X(T_j)$ and n_j/N are the same quantities as used in Equation 4.1.2–1.

Evaluate the cooling mode cyclic degradation factor C_D^c as specified in section 3.5.3 of this appendix.

d. Evaluate $\dot{E}_c(T_j)$ using,

$$\dot{E}_c(T_j) = \dot{E}_c^{k=1}(T_j) + \frac{\dot{E}_c^{k=2}(T_j) - \dot{E}_c^{k=1}(T_j)}{\mathrm{FP}_c^{k=2} - \mathrm{FP}_c^{k=1}} * [\mathrm{FP}_c(T_j) - \mathrm{FP}_c^{k=1}]$$

where:

$$\dot{E}_c^{k=1}(T_j) = \dot{E}_c^{k=1}(82) + \frac{\dot{E}_c^{k=1}(95) - \dot{E}_c^{k=1}(82)}{95-82} * (T_j - 82)$$

the electrical power consumption of the test unit at outdoor temperature T_j if operated at the cooling minimum air volume rate, W.

$\dot{E}_c^{k=2}(T_j) = \dot{E}_c^{k=2}(82) + \frac{\dot{E}_c^{k=2}(95)-\dot{E}_c^{k=2}(82)}{95-82} * (T_j - 82)$ the electrical power consumption of the test unit at outdoor temperature T_j if operated at the cooling full-load air volume rate, W.

e. The parameters $FP_c^{k=1}$, and $FP_c^{k=2}$, and $FP_c(T_j)$ are the same quantities that are used when evaluating Equation 4.1.2–2. Refer to sections 3.2.2.1, 3.1.4 to 3.1.4.2, and 3.3 of this appendix regarding the definitions and calculations of $\dot{E}_c^{k=1}(82)$, $\dot{E}_c^{k=1}(95)$, $\dot{E}_c^{k=2}(82)$, and $\dot{E}_c^{k=2}(95)$.

4.1.2.2 Units Covered by Section 3.2.2.2 of this Appendix Where Indoor Blower Capacity Modulation is Used to Adjust the Sensible to Total Cooling Capacity Ratio. Calculate SEER as Specified in Section 4.1.1 of This Appendix

4.1.3 SEER Calculations for an Air Conditioner or Heat Pump Having a Two-Capacity Compressor

Calculate SEER using Equation 4.1–1. Evaluate the space cooling capacity, $\dot{Q}_c^{k=1}(T_j)$, and electrical power consumption, $\dot{E}_c^{k=1}(T_j)$, of the test unit when operating at low compressor capacity and outdoor temperature T_j using,

$$\text{Equation 4.1.3-1} \quad \dot{Q}_c^{k=1}(T_j) = \dot{Q}_c^{k=1}(67) + \frac{\dot{Q}_c^{k=1}(82) - \dot{Q}_c^{k=1}(67)}{82-67} * (T_j - 67)$$

$$\text{Equation 4.1.3-2} \quad \dot{E}_c^{k=1}(T_j) = \dot{E}_c^{k=1}(67) + \frac{\dot{E}_c^{k=1}(82) - \dot{E}_c^{k=1}(67)}{82-67} * (T_j - 67)$$

where $\dot{Q}_c^{k=1}(82)$ and $\dot{E}_c^{k=1}(82)$ are determined from the B_1 test, $\dot{Q}_c^{k=1}(67)$ and $\dot{E}_c^{k=1}(67)$ are determined from the F_1 test, and all four quantities are calculated as specified in section 3.3 of this appendix. Evaluate the space cooling capacity, $\dot{Q}_c^{k=2}(T_j)$, and electrical power consumption, $\dot{E}_c^{k=2}(T_j)$, of the test unit when operating at high compressor capacity and outdoor temperature T_j using,

$$\text{Equation 4.1.3-3} \quad \dot{Q}_c^{k=2}(T_j) = \dot{Q}_c^{k=2}(82) + \frac{\dot{Q}_c^{k=2}(95) - \dot{Q}_c^{k=2}(82)}{95-82} * (T_j - 82)$$

$$\text{Equation 4.1.3-4} \quad \dot{E}_c^{k=2}(T_j) = \dot{E}_c^{k=2}(82) + \frac{\dot{E}_c^{k=2}(95) - \dot{E}_c^{k=2}(82)}{95-82} * (T_j - 82)$$

where $\dot{Q}_c^{k=2}(95)$ and $\dot{E}_c^{k=2}(95)$ are determined from the A_2 test, $\dot{Q}_c^{k=2}(82)$, and $\dot{E}_c^{k=2}(82)$, are determined from the B_2 test, and all are calculated as specified in section 3.3 of this appendix.

The calculation of Equation 4.1–1 quantities $q_c(T_j)/N$ and $e_c(T_j)/N$ differs depending on whether the test unit would operate at low capacity (section 4.1.3.1 of this appendix), cycle between low and high capacity (section 4.1.3.2 of this appendix), or operate at high capacity (sections 4.1.3.3 and 4.1.3.4 of this appendix) in responding to the building load. For units that lock out low capacity operation at higher outdoor temperatures, the outdoor temperature at which the unit locks out must be that specified by the manufacturer in the certification report so that the appropriate equations are used. Use Equation 4.1–2 to calculate the building load, $BL(T_j)$, for each temperature bin.

4.1.3.1 Steady-state space cooling capacity at low compressor capacity is greater than or equal to the building cooling load at temperature T_j, $\dot{Q}_c^{k=1}(T_j) \geq BL(T_j)$.

$$\frac{q_c(T_j)}{N} = X^{k=1}(T_j) * \dot{Q}_c^{k=1}(T_j) * \frac{n_j}{N} \qquad \frac{e_c(T_j)}{N} = \frac{X^{k=1}(T_j) * \dot{E}_c^{k=1}(T_j)}{PLF_j} * \frac{n_j}{N}$$

Where:

$X^{k=1}(T_j) = BL(T_j)/\dot{Q}_c^{k=1}(T_j)$, the cooling mode low capacity load factor for temperature bin j, dimensionless.

$PLF_j = 1 - C_D^c \cdot [1 - X^{k=1}(T_j)]$, the part load factor, dimensionless.

n_j/N = fractional bin hours for the cooling season; the ratio of the number of hours during the cooling season when the outdoor temperature fell within the range represented by bin temperature T_j to the total number of hours in the cooling season, dimensionless.

Obtain the fractional bin hours for the cooling season, n_j/N, from Table 18. Use Equations 4.1.3–1 and 4.1.3–2, respectively, to evaluate $\dot{Q}_c^{k=1}(T_j)$ and $\dot{E}_c^{k=1}(T_j)$. Evaluate the cooling mode cyclic degradation factor C_D^c as specified in section 3.5.3 of this appendix.

TABLE 18—DISTRIBUTION OF FRACTIONAL HOURS WITHIN COOLING SEASON TEMPERATURE BINS

Bin number, j	Bin temperature range °F	Representative temperature for bin °F	Fraction of of total temperature bin hours, n_j/N
1	65–69	67	0.214
2	70–74	72	0.231
3	75–79	77	0.216
4	80–84	82	0.161
5	85–89	87	0.104
6	90–94	92	0.052
7	95–99	97	0.018
8	100–104	102	0.004

4.1.3.2 Unit alternates between high (k=2) and low (k=1) compressor capacity to satisfy the building cooling load at temperature T_j, $\dot{Q}_c^{k=1}(T_j) < BL(T_j) < \dot{Q}_c^{k=2}(T_j)$.

$$\frac{q_c(T_j)}{N} = [X^{k=1}(T_j) * \dot{Q}_c^{k=1}(T_j) + X^{k=2}(T_j) * \dot{Q}_c^{k=2}(T_j)] * \frac{n_j}{N}$$

$$\frac{e_c(T_j)}{N} = [X^{k=1}(T_j) * \dot{E}_c^{k=1}(T_j) + X^{k=2}(T_j) * \dot{E}_c^{k=2}(T_j)] * \frac{n_j}{N}$$

where:

$X^{k=1}(T_j) = \frac{\dot{Q}_c^{k=2}(T_j) - BL(T_j)}{\dot{Q}_c^{k=2}(T_j) - \dot{Q}_c^{k=1}(T_j)}$ the cooling mode, low capacity load factor for temperature bin j, dimensionless.

$X^{k=2}(T_j) = 1 - X^{k=1}(T_j)$, the cooling mode, high capacity load factor for temperature bin j, dimensionless.

Obtain the fractional bin hours for the cooling season, n_j/N, from Table 18. Use Equations 4.1.3–1 and 4.1.3–2, respectively, to evaluate $\dot{Q}_c^{k=1}(T_j)$ and $\dot{E}_c^{k=1}(T_j)$. Use Equations 4.1.3–3 and 4.1.3–4, respectively, to evaluate $\dot{Q}_c^{k=2}(T_j)$ and $\dot{E}_c^{k=2}(T_j)$.

4.1.3.3 Unit only operates at high (k=2) compressor capacity at temperature T_j and its capacity is greater than the building cooling load, $BL(T_j) < \dot{Q}_c^{k=2}(T_j)$. This section applies to units that lock out low compressor capacity operation at higher outdoor temperatures.

$$\frac{q_c(T_j)}{N} = X^{k=2}(T_j) * \dot{Q}_c^{k=2}(T_j) * \frac{n_j}{N} \qquad \frac{e_c(T_j)}{N} = \frac{X^{k=2}(T_j) * \dot{E}_c^{k=2}(T_j)}{PLF_j} * \frac{n_j}{N}$$

Where,

$X^{k=2}(T_j) = BL(T_j)/\dot{Q}_c^{k=2}(T_j)$, the cooling mode high capacity load factor for temperature bin j, dimensionless.

$PLF_j = 1 - C_D^c(k = 2) * [1 - X^{k=2}(T_j)]$, the part load factor, dimensionless.

Obtain the fractional bin hours for the cooling season, n_j/N, from Table 18. Use Equations 4.1.3–3 and 4.1.3–4, respectively, to evaluate $\dot{Q}_c^{k=2}(T_j)$ and $\dot{E}_c^{k=2}(T_j)$. If the C_2 and D_2 tests described in section 3.2.3 and Table 6 of this appendix are not conducted, set C_D^c (k=2) equal to the default value specified in section 3.5.3 of this appendix.

4.1.3.4 Unit must operate continuously at high (k=2) compressor capacity at temperature T_j, $BL(T_j) \geq \dot{Q}_c^{k=2}(T_j)$.

$$\frac{q_c(T_j)}{N} = \dot{Q}_c^{k=2}(T_j) * \frac{n_j}{N} \qquad \frac{e_c(T_j)}{N} = \dot{E}_c^{k=2}(T_j) * \frac{n_j}{N}$$

Obtain the fractional bin hours for the cooling season, n_j/N, from Table 18. Use Equations 4.1.3–3 and 4.1.3–4, respectively, to evaluate $\dot{Q}_c^{k=2}(T_j)$ and $\dot{E}_c^{k=2}(T_j)$.

4.1.4 SEER Calculations for an Air Conditioner or Heat Pump Having a Variable-Speed Compressor

Calculate SEER using Equation 4.1–1. Evaluate the space cooling capacity, $\dot{Q}_c^{k=1}(T_j)$, and electrical power consumption, $\dot{E}_c^{k=1}(T_j)$, of the test unit when operating at minimum compressor speed and outdoor temperature T_j. Use,

$$\text{Equation 4.1.4-1} \quad \dot{Q}_c^{k=1}(T_j) = \dot{Q}_c^{k=1}(67) + \frac{\dot{Q}_c^{k=1}(82) - \dot{Q}_c^{k=1}(67)}{82-67} * (T_j - 67)$$

$$\text{Equation 4.1.4-2} \quad \dot{E}_c^{k=1}(T_j) = \dot{E}_c^{k=1}(67) + \frac{\dot{E}_c^{k=1}(82) - \dot{E}_c^{k=1}(67)}{82-67} * (T_j - 67)$$

where $\dot{Q}_c^{k=1}(82)$ and $\dot{E}_c^{k=1}(82)$ are determined from the B_1 test, $\dot{Q}_c^{k=1}(67)$ and $\dot{E}_c^{k=1}(67)$ are determined from the F1 test, and all four quantities are calculated as specified in section 3.3 of this appendix. Evaluate the space cooling capacity, $\dot{Q}_c^{k=2}(T_j)$, and electrical power consumption, $\dot{E}_c^{k=2}(T_j)$, of the test unit when operating at full compressor speed and outdoor temperature T_j. Use Equations 4.1.3–3 and 4.1.3–4, respectively, where $\dot{Q}_c^{k=2}(95)$ and $\dot{E}_c^{k=2}(95)$ are determined from the A_2 test, $\dot{Q}_c^{k=2}(82)$ and $\dot{E}_c^{k=2}(82)$ are determined from the B_2 test, and all four quantities are calculated as specified in section 3.3 of this appendix.

Calculate the space cooling capacity, $\dot{Q}_c^{k=v}(T_j)$, and electrical power consumption, $\dot{E}_c^{k=v}(T_j)$, of the test unit when operating at outdoor temperature T_j and the intermediate compressor speed used during the section 3.2.4 (and Table 7) E_V test of this appendix using,

$$\text{Equation 4.1.4-3} \quad \dot{Q}_c^{k=v}(T_j) = \dot{Q}_c^{k=v}(87) + M_Q * (T_j - 87)$$

$$\text{Equation 4.1.4-4} \quad \dot{E}_c^{k=v}(T_j) = \dot{E}_h^{k=v}(87) + M_E * (T_j - 87)$$

where $\dot{Q}_c^{k=v}(87)$ and $\dot{E}_c^{k=v}(87)$ are determined from the E_V test and calculated as specified in section 3.3 of this appendix. Approximate the slopes of the k=v intermediate speed cooling capacity and electrical power input curves, M_Q and M_E, as follows:

$$M_Q = \left[\frac{\dot{Q}_c^{k=1}(82) - \dot{Q}_c^{k=1}(67)}{82 - 67} * (1 - N_Q)\right] + \left[N_Q * \frac{\dot{Q}_c^{k=2}(95) - \dot{Q}_c^{k=2}(82)}{95 - 82}\right]$$

$$M_E = \left[\frac{\dot{E}_c^{k=1}(82) - \dot{E}_c^{k=1}(67)}{82 - 67} * (1 - N_E)\right] + \left[N_E * \frac{\dot{E}_c^{k=2}(95) - \dot{E}_c^{k=2}(82)}{95 - 82}\right]$$

where,

$$N_Q = \frac{\dot{Q}_c^{k=v}(87) - \dot{Q}_c^{k=1}(87)}{\dot{Q}_c^{k=2}(87) - \dot{Q}_c^{k=1}(87)} \qquad N_E = \frac{\dot{E}_c^{k=v}(87) - \dot{E}_c^{k=1}(87)}{\dot{E}_c^{k=2}(87) - \dot{E}_c^{k=1}(87)}$$

Use Equations 4.1.4–1 and 4.1.4–2, respectively, to calculate $\dot{Q}_c^{k=1}(87)$ and $\dot{E}_c^{k=1}(87)$.

4.1.4.1 Steady-state space cooling capacity when operating at minimum compressor speed is greater than or equal to the building cooling load at temperature T_j, $\dot{Q}_c^{k=1}(T_j) \geq BL(T_j)$.

$$\frac{q_c(T_j)}{N} = X^{k=1}(T_j) * \dot{Q}_c^{k=1}(T_j) * \frac{n_j}{N} \qquad \frac{e_c(T_j)}{N} = \frac{X^{k=1}(T_j) * \dot{E}_c^{k=1}(T_j)}{PLF_j} * \frac{n_j}{N}$$

Where:

$X^{k=1}(T_j) = BL(T_j)/\dot{Q}_c^{k=1}(T_j)$, the cooling mode minimum speed load factor for temperature bin j, dimensionless.

$PLF_j = 1 - C_D^c - [1 - X^{k=1}(T_j)]$, the part load factor, dimensionless.

n_j/N = fractional bin hours for the cooling season; the ratio of the number of hours during the cooling season when the outdoor temperature fell within the range represented by bin temperature T_j to the total number of hours in the cooling season, dimensionless.

Obtain the fractional bin hours for the cooling season, n_j/N, from Table 18. Use Equations 4.1.3–1 and 4.1.3–2, respectively, to evaluate $\dot{Q}_c^{k=1}(T_j)$ and $\dot{E}_c^{k=1}(T_j)$. Evaluate the cooling mode cyclic degradation factor C_D^c as specified in section 3.5.3 of this appendix.

4.1.4.2 Unit operates at an intermediate compressor speed (k=i) in order to match the building cooling load at temperature T_j, $\dot{Q}_c^{k=1}(T_j) < BL(T_j) < \dot{Q}_c^{k=2}(T_j)$.

$$\frac{q_c(T_j)}{N} = \dot{Q}_c^{k=i}(T_j) * \frac{n_j}{N} \qquad \frac{e_c(T_j)}{N} = \dot{E}_c^{k=i}(T_j) * \frac{n_j}{N}$$

Where:

$\dot{Q}_c^{k=i}(T_j) = BL(T_j)$, the space cooling capacity delivered by the unit in matching the building load at temperature T_j, Btu/h.

The matching occurs with the unit operating at compressor speed k = i.

$\dot{E}_c^{k=i}(T_j) = \frac{\dot{Q}_c^{k=i}(T_j)}{EER^{k=i}(T_j)}$, the electrical power input required by the test unit when operating at a compressor speed of k = i and temperature T_j, W.

$EER^{k=i}(T_j)$ = the steady-state energy efficiency ratio of the test unit when operating at a compressor speed of k = i and temperature T_j, Btu/h per W.

Obtain the fractional bin hours for the cooling season, n_j/N, from Table 18 of this section. For each temperature bin where the unit operates at an intermediate compressor speed, determine the energy efficiency ratio $EER^{k=i}(T_j)$ using the following equations,

For each temperature bin where $\dot{Q}_c^{k=1}(T_j) < BL(T_j) < \dot{Q}_c^{k=v} \leq (T_j)$,

$$EER^{k=i}(T_j) = EER^{k=1}(T_j) + \frac{EER^{k=v}(T_j) - EER^{k=1}(T_j)}{Q^{k=v}(T_j) - Q^{k=1}(T_j)} * (BL(T_j) - Q^{k=1}(T_j))$$

For each temperature bin where $\dot{Q}_c^{k=v}(T_j) \leq BL(T_j) < \dot{Q}_c^{k=2}(T_j)$,

$$EER^{k=i}(T_j) = EER^{k=v}(T_j) + \frac{EER^{k=2}(T_j) - EER^{k=v}(T_j)}{Q^{k=2}(T_j) - Q^{k=v}(T_j)} * (BL(T_j) - Q^{k=v}(T_j))$$

Where:

$EER^{k=1}(T_j)$ is the steady-state energy efficiency ratio of the test unit when operating at minimum compressor speed and temperature Tj, Btu/h per W, calculated using capacity $\dot{Q}_c^{k=1}(T_j)$ calculated using Equation 4.1.4–1 and electrical power consumption $\dot{E}_c^{k=1}(T_j)$ calculated using Equation 4.1.4–2;

$EER^{k=v}(T_j)$ is the steady-state energy efficiency ratio of the test unit when operating at intermediate compressor speed and temperature Tj, Btu/h per W, calculated using capacity $\dot{Q}_c^{k=v}(T_j)$ calculated using Equation 4.1.4–3 and electrical power consumption $\dot{E}_c^{k=v}(T_j)$ calculated using Equation 4.1.4–4;

$EER^{k=2}(T_j)$ is the steady-state energy efficiency ratio of the test unit when operating at full compressor speed and temperature Tj, Btu/h per W, calculated using capacity $\dot{Q}_c^{k=2}(T_j)$ and electrical power consumption $\dot{E}_c^{k=2}(T_j)$, both calculated as described in section 4.1.4; and

$BL(T_j)$ is the building cooling load at temperature T_j, Btu/h.

4.1.4.3 Unit must operate continuously at full (k=2) compressor speed at temperature Tj, $BL(T_j) \geq \dot{Q}_c^{k=2}(T_j)$. Evaluate the Equation 4.1–1 quantities

$$\frac{q_c(T_j)}{N} \text{ and } \frac{e_c(T_j)}{N}$$

as specified in section 4.1.3.4 of this appendix with the understanding that $\dot{Q}_c^{k=2}(T_j)$ and $\dot{E}_c^{k=2}(T_j)$ correspond to full compressor speed operation and are derived from the results of the tests specified in section 3.2.4 of this appendix.

4.1.5 SEER calculations for an air conditioner or heat pump having a single indoor unit with multiple indoor blowers.

Calculate SEER using Eq. 4.1–1, where $q_c(Tj)/N$ and $e_c(Tj)/N$ are evaluated as specified in the applicable subsection.

4.1.5.1 For multiple indoor blower systems that are connected to a single, single-speed outdoor unit.

a. Calculate the space cooling capacity, $\dot{Q}_c^{k=1}(T_j)$, and electrical power consumption, $\dot{E}_c^{k=1}(T_j)$, of the test unit when operating at the cooling minimum air volume rate and outdoor temperature T_j using the equations given in section 4.1.2.1 of this appendix. Calculate the space cooling capacity, $\dot{Q}_c^{k=2}(T_j)$, and electrical power consumption, $\dot{E}_c^{k=2}(T_j)$, of the test unit when operating at the cooling full-load air volume rate and outdoor temperature T_j using the equations given in section 4.1.2.1 of this appendix. In evaluating the section 4.1.2.1 equations, determine the quantities $\dot{Q}_c^{k=1}(82)$ and $\dot{E}_c^{k=1}(82)$ from the B1 test, $\dot{Q}_c^{k=1}(95)$ and $\dot{E}_c^{k=1}(95)$ from the Al test, $\dot{Q}_c^{k=2}(82)$ and $\dot{E}_c^{k=2}(82)$ from the B2 test, and $\dot{Q}_c^{k=2}(95)$ and $\dot{E}_c^{k=2}(95)$ from the A2 test. Evaluate all eight quantities as specified in section 3.3. Refer to section 3.2.2.1 and Table 5 for additional information on the four referenced laboratory tests.

b. Determine the cooling mode cyclic degradation coefficient, C_D^c, as per sections 3.2.2.1 and 3.5 to 3.5.3 of this appendix. Assign this same value to C_D^c(K=2).

c. Except for using the above values of $\dot{Q}_c^{k=1}(T_j)$, $\dot{E}_c^{k=1}(T_j)$, $\dot{E}_c^{k=2}(T_j)$, $\dot{Q}_c^{k=2}(T_j)$, C_D^c, and C_D^c (K=2), calculate the quantities $q_c(T_j)/N$ and $e_c(T_j)/N$ as specified in section 4.1.3.1 of this appendix for cases where $\dot{Q}_c^{k=1}(T_j) \geq BL(T_j)$. For all other outdoor bin temperatures, T_j, calculate $q_c(Tj)/N$ and $e_c(Tj)/N$ as specified in section 4.1.3.3 of this appendix if $\dot{Q}_c^{k=2}(T_j) > BL\ (T_j)$ or as specified in section 4.1.3.4 of this appendix if $\dot{Q}_c^{k=2}(T_j) \leq BL(T_j)$.

4.1.5.2 For multiple indoor blower systems that are connected to either a lone outdoor unit having a two-capacity compressor or two separate but identical model single-speed outdoor units. Calculate the quantities $q_c(Tj)/N$ and $e_c(Tj)/N$ as specified in section 4.1.3 of this appendix.

4.2 Heating Seasonal Performance Factor (HSPF) Calculations

Unless an approved alternative efficiency determination method is used, as set forth in 10 CFR 429.70(e). Calculate HSPF as follows: Six generalized climatic regions are depicted in Figure 1 and otherwise defined in Table 19. For each of these regions and for each applicable standardized design heating requirement, evaluate the heating seasonal performance factor using,

$$\text{Equation 4.2-1} \qquad HSPF = \frac{\sum_j^J n_j * BL(T_j)}{\sum_j^J e_h(T_j) + \sum_j^J RH(T_j)} * F_{def} = \frac{\sum_j^J \left[\frac{n_j}{N} * BL(T_j)\right]}{\sum_j^J \frac{e_h(T_j)}{N} + \sum_j^J \frac{RH(T_j)}{N}} * F_{def}$$

Where:

$e_h(T_j)/N$ = The ratio of the electrical energy consumed by the heat pump during periods of the heating season when the outdoor temperature fell within the range represented by bin temperature T_j to the total number of hours in the heating season (N), W. For heat pumps having a heat comfort controller, this ratio may also include electrical energy used by resistive elements to maintain a minimum air delivery temperature (see 4.2.5).

$RH(T_j)/N$ = The ratio of the electrical energy used for resistive space heating during periods when the outdoor temperature fell within the range represented by bin temperature T_j to the total number of hours in the heating season (N), W. Except as noted in section 4.2.5 of this appendix, resistive space heating is modeled as being used to meet that portion of the building load that the heat pump does not meet because of insufficient capacity or because the heat pump automatically turns off at the lowest outdoor temperatures. For heat pumps having a heat comfort controller, all or part of the electrical energy used by resistive heaters at a particular bin temperature may be reflected in $e_h(T_j)/N$ (see section 4.2.5 of this appendix).

T_j = the outdoor bin temperature, °F. Outdoor temperatures are "binned" such that calculations are only performed based one temperature within the bin. Bins of 5 °F are used.

n_j/N = Fractional bin hours for the heating season; the ratio of the number of hours during the heating season when the outdoor temperature fell within the range represented by bin temperature T_j to the total number of hours in the heating season, dimensionless. Obtain n_j/N values from Table 19.

j = the bin number, dimensionless.

J = for each generalized climatic region, the total number of temperature bins, dimensionless. Referring to Table 19, J is the highest bin number (j) having a nonzero entry for the fractional bin hours for the generalized climatic region of interest.

F_{def} = the demand defrost credit described in section 3.9.2 of this appendix, dimensionless.

$BL(T_j)$ = the building space conditioning load corresponding to an outdoor temperature of T_j; the heating season building load also depends on the generalized climatic region's outdoor design temperature and the design heating requirement, Btu/h.

TABLE 19—GENERALIZED CLIMATIC REGION INFORMATION

Region No.	I	II	III	IV	V	*VI
Heating Load Hours, HLH	493	857	1,280	1,701	2,202	1,842
Outdoor Design Temperature, T_{OD}	37	27	17	5	−10	30
Heating Load Line Equation Slope Factor, C	1.10	1.06	1.29	1.15	1.16	1.11
Variable Speed Slope Factor, C_{VS}	1.03	0.99	1.20	1.07	1.08	1.03
Zero-Load Temperature, T_{zl}	58	57	56	55	55	57
j T_j (°F)	Fractional Bin Hours, n_j/N					
1 62	.291	.215	.153	.132	.106	.113
2 57	.239	.189	.142	.111	.092	.206
3 52	.194	.163	.138	.103	.086	.215
4 47	.129	.143	.137	.093	.076	.204
5 42	.081	.112	.135	.100	.078	.141
6 37	.041	.088	.118	.109	.087	.076
7 32	.019	.056	.092	.126	.102	.034
8 27	.005	.024	.047	.087	.094	.008
9 22	.001	.008	.021	.055	.074	.003
10 17	0	.002	.009	.036	.055	0
11 12	0	0	.005	.026	.047	0
12 7	0	0	.002	.013	.038	0
13 2	0	0	.001	.006	.029	0
14 −3	0	0	0	.002	.018	0
15 −8	0	0	0	.001	.010	0
16 −13	0	0	0	0	.005	0
17 −18	0	0	0	0	.002	0
18 −23	0	0	0	0	.001	0

* Pacific Coast Region.

Evaluate the building heating load using

$$\text{Equation 4.2-2} \quad BL(T_j) = \frac{(T_{zl}-T_j)}{T_{zl}-T_{OD}} * C * \dot{Q}_c(95°F)$$

Where,

T_j = the outdoor bin temperature, °F

T_{zl} = the zero-load temperature, °F, which varies by climate region according to Table 19

T_{OD} = the outdoor design temperature, °F, which varies by climate region according to Table 19

C = the slope (adjustment) factor, which varies by climate region according to Table 19

$\dot{Q}_c(95\ °F)$ = the cooling capacity at 95 °F determined from the A or A_2 test, Btu/h

For heating-only heat pump units, replace $\dot{Q}_c(95\ °F)$ in Equation 4.2–2 with $\dot{Q}_h(47\ °F)$

$\dot{Q}_h(47\ °F)$ = the heating capacity at 47 °F determined from the H, $H1_2$ or $H1_N$ test, Btu/h.

a. For all heat pumps, HSPF accounts for the heating delivered and the energy consumed by auxiliary resistive elements when operating below the balance point. This condition occurs when the building load exceeds the space heating capacity of the heat pump condenser. For HSPF calculations for all heat pumps, see either section 4.2.1, 4.2.2, 4.2.3, or 4.2.4 of this appendix, whichever applies.

b. For heat pumps with heat comfort controllers (see section 1.2 of this appendix, Definitions), HSPF also accounts for resistive heating contributed when operating above the heat-pump-plus-comfort-controller balance point as a result of maintaining a minimum supply temperature. For heat pumps having a heat comfort controller, see section 4.2.5 of this appendix for the additional steps required for calculating the HSPF.

4.2.1 Additional Steps for Calculating the HSPF of a Blower Coil System Heat Pump Having a Single-Speed Compressor and Either a Fixed-Speed Indoor Blower or a Constant-Air-Volume-Rate Indoor Blower Installed, or a Coil-Only System Heat Pump.

$$\text{Equation 4.2.1-1} \quad \frac{e_h(T_j)}{N} = \frac{X(T_j) * \dot{E}_h(T_j) * \delta(T_j)}{PLF_j} * \frac{n_j}{N}$$

$$\text{Equation 4.2.1-2} \quad \frac{RH(T_j)}{N} = \frac{BL(T_j) - [X(T_j) * \dot{Q}_h(T_j) * \delta(T_j)]}{3.413 \frac{Btu/h}{W}} * \frac{n_j}{N}$$

Where:

$$X(T_j) = \begin{Bmatrix} BL(T_j)/\dot{Q}_h(T_j) \\ or \\ 1 \end{Bmatrix}$$

whichever is less; the heating mode load factor for temperature bin j, dimensionless.

$\dot{Q}_h(T_j)$ = the space heating capacity of the heat pump when operating at outdoor temperature T_j, Btu/h.

$\dot{E}_h(T_j)$ = the electrical power consumption of the heat pump when operating at outdoor temperature T_j, W.

$\delta(T_j)$ = the heat pump low temperature cut-out factor, dimensionless.

$PLF_j = 1 - C_D^h \cdot [1 - X(T_j)]$ the part load factor, dimensionless.

Use Equation 4.2–2 to determine $BL(T_j)$. Obtain fractional bin hours for the heating season, n_j/N, from Table 19. Evaluate the heating mode cyclic degradation factor C_D^h as specified in section 3.8.1 of this appendix.

Determine the low temperature cut-out factor using

$$\text{Equation 4.2.1-3} \quad \delta(T_j) = \begin{Bmatrix} 0, if\ T_j \le T_{off}\ and\ \frac{\dot{Q}_h(T_j)}{3.413 * \dot{E}_h(T_j)} < 1 \\ 1/2, if\ T_{off} < T_j \le T_{on}\ and\ \frac{\dot{Q}_h(T_j)}{3.413 * \dot{E}_h(T_j)} \ge 1 \\ 1, if\ T_j > T_{on}\ and\ \frac{\dot{Q}_h(T_j)}{3.413 * \dot{E}_h(T_j)} \ge 1 \end{Bmatrix}$$

Where:

T_{off} = the outdoor temperature when the compressor is automatically shut off, °F. (If no such temperature exists, T_j is always greater than T_{off} and T_{on}).

T_{on} = the outdoor temperature when the compressor is automatically turned back on, if applicable, following an automatic shut-off, °F.

Calculate $\dot{Q}_h(T_j)$ and $\dot{E}_h(T_j)$ using,

$$\text{Equation 4.2.1-4} \quad \dot{Q}_h(T_j) = \begin{cases} \dot{Q}_h(17) + \frac{[\dot{Q}_h(47) - \dot{Q}_h(17)] * (T_j - 17)}{47 - 17}, & if\ T_j \ge 45\ \text{°F}\ or\ T_j \le 17\ \text{°F} \\ \dot{Q}_h(17) + \frac{[\dot{Q}_h(35) - \dot{Q}_h(17)] * (T_j - 17)}{35 - 17}, & if\ 17\ \text{°F} < T_j < 45\ \text{°F} \end{cases}$$

Equation 4.2.1-5

$$\dot{E}_h(T_j) = \begin{cases} \dot{E}_h(17) + \frac{[\dot{E}_h(47) - \dot{E}_h(17)] * (T_j - 17)}{47 - 17}, & if\ T_j \ge 45\ \text{°F}\ or\ T_j \le 17\ \text{°F} \\ \dot{E}_h(17) + \frac{[\dot{E}_h(35) - \dot{E}_h(17)] * (T_j - 17)}{35 - 17}, & if\ 17\ \text{°F} < T_j < 45\ \text{°F} \end{cases}$$

where $\dot{Q}_h(47)$ and $\dot{E}_h(47)$ are determined from the H1 test and calculated as specified in section 3.7 of this appendix; $\dot{Q}_h(35)$ and $\dot{E}_h(35)$ are determined from the H2 test and calculated as specified in section 3.9.1 of this appendix; and $\dot{Q}_h(17)$ and $\dot{E}_h(17)$ are determined from the H3 test and calculated as specified in section 3.10 of this appendix.

4.2.2 Additional Steps for Calculating the HSPF of a Heat Pump Having a Single-Speed Compressor and a Variable-Speed, Variable-Air-Volume-Rate Indoor Blower

The manufacturer must provide information about how the indoor air volume rate or the indoor blower speed varies over the outdoor temperature range of 65 °F to −23 °F. Calculate the quantities

$$\frac{e_h(T_j)}{N} \text{ and } \frac{RH(T_j)}{N}$$

in Equation 4.2–1 as specified in section 4.2.1 of this appendix with the exception of replacing references to the H1C test and section 3.6.1 of this appendix with the $H1C_1$ test and section 3.6.2 of this appendix. In addition, evaluate the space heating capacity and electrical power consumption of the heat pump $\dot{Q}_h(T_j)$ and $\dot{E}_h(T_j)$ using

Equation 4.2.2-1 $$\dot{Q}_h(T_j) = \dot{Q}_h^{k=1}(T_j) + \frac{\dot{Q}_h^{k=2}(T_j)-\dot{Q}_h^{k=1}(T_j)}{\mathrm{FP}_h^{k=2}-\mathrm{FP}_h^{k=1}} * \left[\mathrm{FP}_h(T_j) - \mathrm{FP}_h^{k=1}\right]$$

Equation 4.2.2-2 $$\dot{E}_h(T_j) = \dot{E}_h^{k=1}(T_j) + \frac{\dot{E}_h^{k=2}(T_j)-\dot{E}_h^{k=1}(T_j)}{\mathrm{FP}_h^{k=2}-\mathrm{FP}_h^{k=1}} * \left[\mathrm{FP}_h(T_j) - \mathrm{FP}_h^{k=1}\right]$$

where the space heating capacity and electrical power consumption at both low capacity (k=1) and high capacity (k=2) at outdoor temperature Tj are determined using

Equation 4.2.2-3 $$\dot{Q}_h^k(T_j) = \begin{cases} \dot{Q}_h^k(17) + \frac{\left[\dot{Q}_h^k(47)-\dot{Q}_h^k(17)\right]*(T_j-17)}{47-17}, & if\ T_j \geq 45\ ^\circ\mathrm{F}\ or\ T_j \leq 17\ ^\circ\mathrm{F} \\ \dot{Q}_h^k(17) + \frac{\left[\dot{Q}_h^k(35)-\dot{Q}_h^k(17)\right]*(T_j-17)}{35-17}, & if\ 17\ ^\circ\mathrm{F} < T_j < 45\ ^\circ\mathrm{F} \end{cases}$$

Equation 4.2.2-4

$$\dot{E}_h^k(T_j) = \begin{cases} \dot{E}_h^k(17) + \frac{\left[\dot{E}_h^k(47) - \dot{E}_h^k(17)\right] * (T_j - 17)}{47 - 17}, & if\ T_j \geq 45\ ^\circ\mathrm{F}\ or\ T_j \leq 17\ ^\circ\mathrm{F} \\ \dot{E}_h^k(17) + \frac{\left[\dot{E}_h^k(35) - \dot{E}_h^k(17)\right] * (T_j - 17)}{35 - 17}, & if\ 17\ ^\circ\mathrm{F} < T_j < 45\ ^\circ\mathrm{F} \end{cases}$$

For units where indoor blower speed is the primary control variable, $\mathrm{FP}_h^{k=1}$ denotes the fan speed used during the required $H1_1$ and $H3_1$ tests (see Table 11), $\mathrm{FP}_h^{k=2}$ denotes the fan speed used during the required $H1_2$, $H2_2$, and $H3_2$ tests, and $\mathrm{FP}_h(T_j)$ denotes the fan speed used by the unit when the outdoor temperature equals T_j. For units where indoor air volume rate is the primary control variable, the three FP_h's are similarly defined only now being expressed in terms of air volume rates rather than fan speeds. Determine $\dot{Q}_h^{k=1}(47)$ and $\dot{E}_h^{k=1}(47)$ from the $H1_1$ test, and $\dot{Q}_h^{k=2}(47)$ and $\dot{E}_h^{k=2}(47)$ from the $H1_2$ test. Calculate all four quantities as specified in section 3.7 of this appendix. Determine $\dot{Q}_h^{k=1}(35)$ and $\dot{E}_h^{k=1}(35)$ as specified in section 3.6.2 of this appendix; determine $\dot{Q}_h^{k=2}(35)$ and $\dot{E}_h^{k=2}(35)$ and from the $H2_2$ test and the calculation specified in section 3.9 of this appendix. Determine $\dot{Q}_h^{k=1}(17)$ and $\dot{E}_h^{k=1}(17$ from the $H3_1$ test, and $\dot{Q}_h^{k=2}(17)$ and $\dot{E}_h^{k=2}(17)$ from the $H3_2$ test. Calculate all four quantities as specified in section 3.10 of this appendix.

4.2.3 Additional Steps for Calculating the HSPF of a Heat Pump Having a Two-Capacity Compressor

The calculation of the Equation 4.2–1 quantities differ depending upon whether the heat pump would operate at low capacity (section 4.2.3.1 of this appendix), cycle between low and high capacity (section 4.2.3.2 of this appendix), or operate at high capacity (sections 4.2.3.3 and 4.2.3.4 of this appendix) in responding to the building load. For heat pumps that lock out low capacity operation at low outdoor temperatures, the outdoor temperature at which the unit locks out must be that specified by the manufacturer in the certification report so that the appropriate equations can be selected.

$$\frac{e_h(T_j)}{N} \text{ and } \frac{RH(T_j)}{N}$$

a. Evaluate the space heating capacity and electrical power consumption of the heat pump when operating at low compressor capacity and outdoor temperature T_j using

$$\dot{Q}_h^{k=1}(T_j) = \begin{cases} \dot{Q}_h^{k=1}(47) + \dfrac{\left[\dot{Q}_h^{k=1}(62) - \dot{Q}_h^{k=1}(47)\right] * (T_j - 47)}{62 - 47}, & if\ T_j \geq 40\ °\mathrm{F} \\ \dot{Q}_h^{k=1}(17) + \dfrac{\left[\dot{Q}_h^{k=1}(35) - \dot{Q}_h^{k=1}(17)\right] * (T_j - 17)}{35 - 17}, & if\ 17\ °\mathrm{F} \leq T_j < 40\ °\mathrm{F} \\ \dot{Q}_h^{k=1}(17) + \dfrac{\left[\dot{Q}_h^{k=1}(47) - \dot{Q}_h^{k=1}(17)\right] * (T_j - 17)}{47 - 17}, & if\ T_j < 17\ °\mathrm{F} \end{cases}$$

$$\dot{E}_h^{k=1}(T_j) = \begin{cases} \dot{E}_h^{k=1}(47) + \dfrac{\left[\dot{E}_h^{k=1}(62) - \dot{E}_h^{k=1}(47)\right] * (T_j - 47)}{62 - 47}, & if\ T_j \geq 40\ °\mathrm{F} \\ \dot{E}_h^{k=1}(17) + \dfrac{\left[\dot{E}_h^{k=1}(35) - \dot{E}_h^{k=1}(17)\right] * (T_j - 17)}{35 - 17}, & if\ 17\ °\mathrm{F} \leq T_j < 40\ °\mathrm{F} \\ \dot{E}_h^{k=1}(17) + \dfrac{\left[\dot{E}_h^{k=1}(47) - \dot{E}_h^{k=1}(17)\right] * (T_j - 17)}{47 - 17}, & if\ T_j < 17\ °\mathrm{F} \end{cases}$$

b. Evaluate the space heating capacity and electrical power consumption ($\dot{Q}_h^{k=2}(T_j)$ and $\dot{E}_h^{k=2}(T_j)$) of the heat pump when operating at high compressor capacity and outdoor temperature Tj by solving Equations 4.2.2–3 and 4.2.2–4, respectively, for k=2. Determine $\dot{Q}_h^{k=1}(62)$ and $\dot{E}_h^{k=1}(62)$ from the $H0_1$ test, $\dot{Q}_h^{k=1}(47)$ and $\dot{E}_h^{k=1}(47)$ from the $H1_1$ test, and $\dot{Q}_h^{k=2}(47)$ and $\dot{E}_h^{k=2}(47)$ from the $H1_2$ test. Calculate all six quantities as specified in section 3.7 of this appendix. Determine $\dot{Q}_h^{k=2}(35)$ and $\dot{E}_h^{k=2}(35)$ from the $H2_2$ test and, if required as described in section 3.6.3 of this appendix, determine $\dot{Q}_h^{k=1}(35)$ and $\dot{E}_h^{k=1}(35)$ from the $H2_1$ test. Calculate the required 35 °F quantities as specified in section 3.9 in this appendix. Determine $\dot{Q}_h^{k=2}(17)$ and $\dot{E}_h^{k=2}(17)$ from the $H3_2$ test and, if required as described in section 3.6.3 of this appendix, determine $\dot{Q}_h^{k=1}(17)$ and $\dot{E}_h^{k=1}(17)$ from the $H3_1$ test. Calculate the required 17 °F quantities as specified in section 3.10 of this appendix.

4.2.3.1 Steady-state space heating capacity when operating at low compressor capacity is greater than or equal to the building heating load at temperature T_j, $\dot{Q}_h^{k=1}(T_j) \geq BL(T_j)$.

$$\text{Equation 4.2.3-1} \quad \frac{e_h(T_j)}{N} = \frac{X^{k=1}(T_j) * \dot{E}_h^{k=1}(T_j) * \delta(T_j)}{PLF_j} * \frac{n_j}{N}$$

$$\text{Equation 4.2.3-2} \quad \frac{RH(T_j)}{N} = \frac{BL(T_j) * [1 - \delta(T_j)]}{3.413 \frac{Btu/h}{W}} * \frac{n_j}{N}$$

Where:

$X^{k=1}(T_j) = BL(T_j)/\dot{Q}_h^{k=1}(T_j)$, the heating mode low capacity load factor for temperature bin *j*, dimensionless.

$PLF_j = 1 - C_D^h \cdot [1 - X^{k=1}(T_j)]$, the part load factor, dimensionless.

$\delta'(T_j)$ = the low temperature cutoff factor, dimensionless.

Evaluate the heating mode cyclic degradation factor C_D^h as specified in section 3.8.1 of this appendix.

Determine the low temperature cut-out factor using

$$\text{Equation 4.2.3-3} \quad \delta(T_j) = \begin{cases} 0, & if\ T_j \leq T_{off} \\ 1/2, & if\ T_{off} < T_j \leq T_{on} \\ 1, & if\ T_j > T_{on} \end{cases}$$

where T_{off} and T_{on} are defined in section 4.2.1 of this appendix. Use the calculations given in section 4.2.3.3 of this appendix, and not the above, if:

a. The heat pump locks out low capacity operation at low outdoor temperatures and

b. T_j is below this lockout threshold temperature.

4.2.3.2 Heat pump alternates between high (k=2) and low (k=1) compressor capacity to satisfy the building heating load at a temperature T_j, $\dot{Q}_h^{k=1}(T_j) < BL(T_j) < \dot{Q}_h^{k=2}(T_j)$.

Calculate $\frac{RH(T_j)}{N}$ using Equation 4.2.3-2. Evaluate $\frac{e_h(T_j)}{N}$ using

$$\frac{e_h(T_j)}{N} = [X^{k=1}(T_j) * \dot{E}_h^{k=1}(T_j) + X^{k=2}(T_j) * \dot{E}_h^{k=2}(T_j)] * \delta(T_j) * \frac{n_j}{N}$$

where:

$$X^{k=1}(T_j) = \frac{\dot{Q}_h^{k=2}(T_j) - BL(T_j)}{\dot{Q}_h^{k=2}(T_j) - \dot{Q}_h^{k=1}(T_j)}$$

$X^{k=2}(T_j) = 1 - X^{k=1}(T_j)$ the heating mode, high capacity load factor for temperature bin $_j$, dimensionless.

Determine the low temperature cut-out factor, $\delta'(T_j)$, using Equation 4.2.3–3.

4.2.3.3 Heat pump only operates at high (k=2) compressor capacity at temperature T_j and its capacity is greater than the building heating load, $BL(T_j) < \dot{Q}_h^{k=2}(T_j)$. This section applies to units that lock out low compressor capacity operation at low outdoor temperatures.

Calculate $\frac{RH(T_j)}{N}$ using Equation 4.2.3-2. Evaluate $\frac{e_h(T_j)}{N}$ using

$$\frac{e_h(T_j)}{N} = \frac{X^{k=2}(T_j) * \dot{E}_h^{k=2}(T_j) * \delta(T_j)}{PLF_j} * \frac{n_j}{N}$$

Where:

$X^{k=2}(T_j) = BL(T_j)/\dot{Q}_h^{k=2}(T_j)$. $PLF_j = 1 - C_D^h\ (k = 2) * [1 - X^{k=2}(T_j)]$

If the $H1C_2$ test described in section 3.6.3 and Table 12 of this appendix is not conducted, set C_D^h (k=2) equal to the default value specified in section 3.8.1 of this appendix.

Determine the low temperature cut-out factor, $\delta(T_j)$, using Equation 4.2.3–3.

4.2.3.4 Heat pump must operate continuously at high (k=2) compressor capacity at temperature T_j, $BL(T_j) \geq \dot{Q}_h^{k=2}(T_j)$.

$$\frac{e_h(T_j)}{N} = \dot{E}_h^{k=2}(T_j) * \delta'(T_j) * \frac{n_j}{N}$$

$$\frac{RH(T_j)}{N} = \frac{BL(T_j)*[\dot{Q}_h^{k=2}(T_j)*\delta'(T_j)]}{3.413\frac{Btu/h}{W}} * \frac{n_j}{N}$$

where:

$$\delta'(T_j) = \begin{cases} 0, & if\ T_j \leq T_{off}\ or\ \frac{\dot{Q}_h^{k=2}(T_j)}{3.413 * \dot{E}_h^{k=2}(T_j)} < 1 \\ 1/2, & if\ T_{off} < T_j \leq T_{on}\ and\ \frac{\dot{Q}_h^{k=2}(T_j)}{3.413 * \dot{E}_h^{k=2}(T_j)} \geq 1 \\ 1, & if\ T_j > T_{on}\ and\ \frac{\dot{Q}_h^{k=2}(T_j)}{3.413 * \dot{E}_h^{k=2}(T_j)} \geq 1 \end{cases}$$

a. Minimum Compressor Speed. Evaluate the space heating capacity, $\dot{Q}_h^{k=1}(T_j)$, and electrical power consumption, $\dot{E}_h^{k=1}(T_j)$, of the heat pump when operating at minimum compressor speed and outdoor temperature T_j using

Equation 4.2.4-1 $$\dot{Q}_h^{k=1}(T_j) = \dot{Q}_h^{k=1}(47) + \frac{\dot{Q}_h^{k=1}(62) - \dot{Q}_h^{k=1}(47)}{62-47} * (T_j - 47)$$

Equation 4.2.4-2 $$\dot{E}_h^{k=1}(T_j) = \dot{E}_h^{k=1}(47) + \frac{\dot{E}_h^{k=1}(62) - \dot{E}_h^{k=1}(47)}{62-47} * (T_j - 47)$$

where $\dot{Q}_h^{k=1}(62)$ and $\dot{E}_h^{k=1}(62)$ are determined from the H0$_1$ test, $Q_h^{k=1}(47)$ and $\dot{E}_h^{k=1}(47)$ are determined from the H1$_1$ test, and all four quantities are calculated as specified in section 3.7 of this appendix.

b. Minimum Compressor Speed for Minimum-speed-limiting Variable-speed Heat Pumps: Evaluate the space heating capacity, $\dot{Q}_h^{k=1}(T_j)$, and electrical power consumption, $\dot{E}_h^{k=1}(T_j)$, of the heat pump when operating at minimum compressor speed and outdoor temperature T_j using

Equation 4.2.4-3

$$\dot{Q}_h^{k=1}(T_j) = \begin{cases} \dot{Q}_h^{k=1}(47) + \dfrac{\left[\dot{Q}_h^{k=1}(62) - \dot{Q}_h^{k=1}(47)\right] * (T_j - 47)}{62 - 47}, & if\ T_j \geq 47\ °F \\ \dot{Q}_h^{k=v}(35) + \dfrac{\left[\dot{Q}_h^{k=1}(47) - \dot{Q}_h^{k=v}(35)\right] * (T_j - 35)}{47 - 35}, & if\ 35\ °F \leq T_j < 47\ °F \\ \dot{Q}_h^{k=v}(T_j), \quad if\ T_j < 35\ °F & \end{cases}$$

Equation 4.2.4-4

$$\dot{E}_h^{k=1}(T_j) = \begin{cases} \dot{E}_h^{k=1}(47) + \dfrac{\left[\dot{E}_h^{k=1}(62) - \dot{E}_h^{k=1}(47)\right] * (T_j - 47)}{62 - 47}, & if\ T_j \geq 47\ °F \\ \dot{E}_h^{k=v}(35) + \dfrac{\left[\dot{E}_h^{k=1}(47) - \dot{E}_h^{k=v}(35)\right] * (T_j - 35)}{47 - 35}, & if\ 35\ °F \leq T_j < 47\ °F \\ \dot{E}_h^{k=v}(T_j), \quad if\ T_j < 35\ °F & \end{cases}$$

where $\dot{Q}_h^{k=1}(62)$ and $\dot{E}_h^{k=1}(62)$ are determined from the H0$_1$ test, $\dot{Q}_h^{k=1}(47)$ and $\dot{E}_h^{k=1}(47)$ are determined from the H1$_1$ test, and all four quantities are calculated as specified in section 3.7 of this appendix; $\dot{Q}_h^{k=v}(35)$ and $\dot{E}_h^{k=v}(35)$ are determined from the H2$_v$ test and are calculated as specified in section 3.9 of this appendix; and $\dot{Q}_h^{k=v}(T_j)$ and $\dot{E}_h^{k=v}(T_j)$ are calculated using equations 4.2.4–5 and 4.2.4–6, respectively.

c. Full Compressor Speed for Heat Pumps for which the H4$_2$ test is not Conducted.

Evaluate the space heating capacity, $\dot{Q}_h^{k=2}(T_j)$, and electrical power consumption, $\dot{E}_h^{k=2}(T_j)$, of the heat pump when operating at full compressor speed and outdoor temperature T_j by solving Equations 4.2.2–3 and 4.2.2–4, respectively, for k=2, using $\dot{Q}_{hcalc}^{k=2}(47)$ to represent $\dot{Q}_h^{k=2}(47)$ and $\dot{E}_{hcalc}^{k=2}(47)$ to represent $\dot{E}_h^{k=2}(47)$ (see section 3.6.4.b of this appendix regarding determination of the capacity and power input used in the HSPF calculations to represent the H1$_2$ Test). Determine $\dot{Q}_h^{k=2}(35)$ and $\dot{E}_h^{k=2}(35)$ from the H2$_2$ test and the calculations specified in section 3.9 or, if the H2$_2$ test is not conducted, by conducting the calculations specified in section 3.6.4. Determine $\dot{Q}_h^{k=2}(17)$ and $\dot{E}_h^{k=2}(17)$ from the H3$_2$ test and the methods specified in section 3.10 of this appendix.

d. Full Compressor Speed for Heat Pumps for which the H4$_2$ test is Conducted.

For T_j above 17 °F, evaluate the space heating capacity, $\dot{Q}_h^{k=2}(T_j)$, and electrical power consumption, $\dot{E}_h^{k=2}(T_j)$, of the heat pump when operating at full compressor speed as described above for heat pumps for which the H4$_2$ is not conducted. For T_j between 5 °F and 17 °F, evaluate the space heating capacity, $\dot{Q}_h^{k=2}(T_j)$, and electrical power consumption, $\dot{E}_h^{k=2}(T_j)$, of the heat pump when operating at full compressor speed using the following equations:

$$\dot{Q}_h^{k=2}(T_j) = \dot{Q}_h^{k=2}(5) + \frac{\dot{Q}_h^{k=2}(17) - \dot{Q}_h^{k=2}(5)}{17 - 5} * (T_j - 5)$$

$$\dot{E}_h^{k=2}(T_j) = \dot{E}_h^{k=2}(5) + \frac{\dot{E}_h^{k=2}(17) - \dot{E}_h^{k=2}(5)}{17 - 5} * (T_j - 5)$$

Determine $\dot{Q}_h^{k=2}(17)$ and $\dot{E}_h^{k=2}(17)$ from the H3$_2$ test, and $\dot{Q}_h^{k=2}(5)$ and $\dot{E}_h^{k=2}(5)$ from the H4$_2$ test, using the methods specified in section 3.10 of this appendix for all four values.

For T_j below 5 °F, evaluate the space heating capacity, $\dot{Q}_h^{k=2}(T_j)$, and electrical power consumption, $\dot{E}_h^{k=2}(T_j)$, of the heat pump when operating at full compressor speed using the following equations:

$$\dot{Q}_h^{k=2}(T_j) = \dot{Q}_h^{k=2}(5) - \frac{\dot{Q}_{hcalc}^{k=2}(47) - \dot{Q}_h^{k=2}(17)}{47 - 17} * (5 - T_j)$$

$$\dot{E}_h^{k=2}(T_j) = \dot{E}_h^{k=2}(5) - \frac{\dot{E}_{hcalc}^{k=2}(47) - \dot{E}_h^{k=2}(17)}{47 - 17} * (5 - T_j)$$

Determine $\dot{Q}_{hcalc}^{k=2}(47)$ and $\dot{E}_{;hcalc}^{k=2}(47)$ as described in section 3.6.4.b of this appendix.

Determine $\dot{Q}_h^{k=2}(17)$ and $\dot{E}_h^{k=2}(17)$ from the $H3_2$ test, using the methods specified in section 3.10 of this appendix.

e. Intermediate Compressor Speed. Calculate the space heating capacity, $\dot{Q}_h^{k=v}(T_j)$, and electrical power consumption, of the heat pump when operating at outdoor temperature T_j and the intermediate compressor speed used during the section 3.6.4 $H2_V$ test using

Equation 4.2.4–5 $\dot{Q}_h^{k=v}(T_j) = \dot{Q}_h^{k=v}(35) + M_Q * (T_j - 35)$

Equation 4.2.4–6 $\dot{E}_h^{k=v}(T_j) = \dot{E}_h^{k=v}(35) + M_E * (T_j - 35)$

where $\dot{Q}_h^{k=v}(35)$ and $\dot{E}_h^{k=v}(35)$ are determined from the $H2_V$ test and calculated as specified in section 3.9 of this appendix. Approximate the slopes of the k=v intermediate speed heating capacity and electrical power input curves, M_Q and M_E, as follows:

$$M_Q = \left[\frac{\dot{Q}_h^{k=1}(62) - \dot{Q}_h^{k=1}(47)}{62 - 47} * (1 - N_Q)\right] + \left[N_Q * \frac{\dot{Q}_h^{k=2}(35) - \dot{Q}_h^{k=2}(17)}{35 - 17}\right]$$

$$M_E = \left[\frac{\dot{E}_h^{k=1}(62) - \dot{E}_h^{k=1}(47)}{62 - 47} * (1 - N_E)\right] + \left[N_E * \frac{\dot{E}_h^{k=2}(35) - \dot{E}_h^{k=2}(17)}{35 - 17}\right]$$

where,

$$N_Q = \frac{\dot{Q}_h^{k=v}(35) - \dot{Q}_h^{k=1}(35)}{\dot{Q}_h^{k=2}(35) - \dot{Q}_h^{k=1}(35)} \qquad N_E = \frac{\dot{E}_h^{k=v}(35) - \dot{E}_h^{k=1}(35)}{\dot{E}_h^{k=2}(35) - \dot{E}_h^{k=1}(35)}$$

Use Equations 4.2.4–1 and 4.2.4–2, respectively, to calculate $\dot{Q}_h^{k=1}(35)$ and $E_h^{k=1}(35)$, whether or not the heat pump is a minimum-speed-limiting variable-speed heat pump.

4.2.4.1 Steady-state space heating capacity when operating at minimum compressor speed is greater than or equal to the building heating load at temperature T_j, $\dot{Q}_h^{k=1}(T_j \geq BL(T_j)$. Evaluate the Equation 4.2–1 quantities

$$\frac{RH(T_j)}{N} \text{ and } \frac{e_h(T_j)}{N}$$

as specified in section 4.2.3.1 of this appendix. Except now use Equations 4.2.4–1 and 4.2.4–2 (for heat pumps that are not minimum-speed-limiting) or Equations 4.3.4–3 and 4.2.4–4 (for minimum-speed-limiting variable-speed heat pumps) to evaluate $\dot{Q}_h^{k=1}(T_j)$ and $\dot{E}_h^{k=1}(T_j)$, respectively, and replace section 4.2.3.1 references to "low capacity" and section 3.6.3 of this appendix with "minimum speed" and section 3.6.4 of this appendix. Also, the last sentence of section 4.2.3.1 of this appendix does not apply.

4.2.4.2 Heat pump operates at an intermediate compressor speed (k=i) in order to match the building heating load at a temperature T_j, $\dot{Q}_h^{k=1}(T_j) < BL(T_j) < \dot{Q}_h^{k=2}(T_j)$. Calculate

$\frac{RH(T_j)}{N}$ using Equation 4.2.3-2 while evaluating $\frac{e_h(T_j)}{N}$ using,

$$\frac{e_h(T_j)}{N} = \dot{E}_h^{k=i}(T_j) * \delta(T_j) * \frac{n_j}{N}$$

where:

$$\dot{E}_h^{k=i}(T_j) = \frac{\dot{Q}_h^{k=i}(T_j)}{3.413 \frac{Btu/h}{W} * COP^{k=i}(T_j)}$$

and $\delta(T_j)$ is evaluated using Equation 4.2.3–3 while,

$\dot{Q}_h^{k=i}(T_j) = BL(T_j)$, the space heating capacity delivered by the unit in matching the building load at temperature (T_j), Btu/h. The matching occurs with the heat pump operating at compressor speed k=i.

$COP^{k=i}(T_j)$ = the steady-state coefficient of performance of the heat pump when operating at compressor speed k=i and temperature T_j, dimensionless.

For each temperature bin where the heat pump operates at an intermediate compressor speed, determine $COP^{k=i}(T_j)$ using the following equations,

For each temperature bin where $\dot{Q}_h^{k=1}(T_j) < BL(T_j) < \dot{Q}_h^{k=v}(T_j)$,

$$COP_h^{k=i}(T_j) = COP_h^{k=1}(T_j) + \frac{COP_h^{k=v}(T_j) - COP_h^{k=1}(T_j)}{Q_h^{k=v}(T_j) - Q_h^{k=1}(T_j)} * (BL(T_j) - Q_h^{k=1}(T_j))$$

For each temperature bin where $\dot{Q}_h^{k=v}(T_j) \leq BL(T_j) < \dot{Q}_h^{k=2}(T_j)$,

$$COP_h^{k=i}(T_j) = COP_h^{k=v}(T_j) + \frac{COP_h^{k=2}(T_j) - COP_h^{k=v}(T_j)}{Q_h^{k=2}(T_j) - Q_h^{k=v}(T_j)} * (BL(T_j) - Q_h^{k=v}(T_j))$$

Where:

$COP_h^{k=1}(T_j)$ is the steady-state coefficient of performance of the heat pump when operating at minimum compressor speed and temperature Tj, dimensionless, calculated using capacity $\dot{Q}_h^{k=1}(T_j)$ calculated using Equation 4.2.4–1 or 4.2.4–3 and electrical power consumption $\dot{E}_h^{k=1}(T_j)$ calculated using Equation 4.2.4–2 or 4.2.4–4;

$COP_h^{k=v}(T_j)$ is the steady-state coefficient of performance of the heat pump when operating at intermediate compressor speed and temperature Tj, dimensionless, calculated using capacity $\dot{Q}_h^{k=v}(T_j)$ calculated using Equation 4.2.4–5 and electrical power consumption $\dot{E}_h^{k=v}(T_j)$ calculated using Equation 4.2.4–6;

$COP_h^{k=2}(T_j)$ is the steady-state coefficient of performance of the heat pump when operating at full compressor speed and temperature Tj, dimensionless, calculated using capacity $\dot{Q}_h^{k=2}(T_j)$ and electrical power consumption $\dot{E}_h^{k=2}(T_j)$, both calculated as described in section 4.2.4; and

$BL(T_j)$ is the building heating load at temperature T_j, Btu/h.

4.2.4.3 Heat pump must operate continuously at full (k=2) compressor speed at temperature T_j, $BL(T_j) \geq \dot{Q}_h^{k=2}(T_j)$. Evaluate the Equation 4.2–1 quantities

$$\frac{RH(T_j)}{N} \text{ and } \frac{e_h(T_j)}{N}$$

as specified in section 4.2.3.4 of this appendix with the understanding that $\dot{Q}_h^{k=2}(T_j)$ and $E_h^{k=2}(T_j)$ correspond to full compressor speed operation and are derived from the results of the specified section 3.6.4 tests of this appendix.

4.2.5 Heat Pumps Having a Heat Comfort Controller

Heat pumps having heat comfort controllers, when set to maintain a typical minimum air delivery temperature, will cause the heat pump condenser to operate less because of a greater contribution from the resistive elements. With a conventional heat pump, resistive heating is only initiated if the heat pump condenser cannot meet the building load (*i.e.*, is delayed until a second stage call from the indoor thermostat). With a heat comfort controller, resistive heating can occur even though the heat pump condenser has adequate capacity to meet the building load (*i.e.*, both on during a first stage call from the indoor thermostat). As a result, the outdoor temperature where the heat pump compressor no longer cycles (*i.e.*, starts to run continuously), will be lower than if the heat pump did not have the heat comfort controller.

4.2.5.1 Blower Coil System Heat Pump Having a Heat Comfort Controller: Additional Steps for Calculating the HSPF of a Heat Pump Having a Single-Speed Compressor and Either a Fixed-Speed Indoor Blower or a Constant-Air-Volume-Rate Indoor Blower Installed, or a Coil-Only System Heat Pump

Calculate the space heating capacity and electrical power of the heat pump without the heat comfort controller being active as specified in section 4.2.1 of this appendix (Equations 4.2.1–4 and 4.2.1–5) for each outdoor bin temperature, T_j, that is listed in Table 19. Denote these capacities and electrical powers by using the subscript "hp" instead of "h." Calculate the mass flow rate (expressed in pounds-mass of dry air per hour) and the specific heat of the indoor air (expressed in Btu/lbm$_{da}$ · °F) from the results of the H1 test using:

$$\dot{m}_{da} = \bar{\dot{V}}_s * 0.075 \frac{lbm_{da}}{ft^3} * \frac{60_{min}}{hr} = \frac{\bar{\dot{V}}_{mx}}{v_n' * [1 + W_n]} * \frac{60_{min}}{hr} = \frac{\bar{\dot{V}}_{mx}}{v_n} * \frac{60_{min}}{hr}$$

where $\bar{\dot{V}}_s$, $\bar{\dot{V}}_{mx}$, v'_n (or v_n), and W_n are defined following Equation 3–1. For each outdoor bin temperature listed in Table 19, calculate the nominal temperature of the air leaving the heat pump condenser coil using,

$$T_0(T_j) = 70°F + \frac{\dot{Q}_{hp}(T_j)}{\dot{m}_{da} * C_{p,da}}$$

Evaluate $e_h(T_j/N)$, $RH(T_j)/N$, $X(T_j)$, PLF_j, and $\delta(T_j)$ as specified in section 4.2.1 of this appendix. For each bin calculation, use the space heating capacity and electrical power from Case 1 or Case 2, whichever applies.

Case 1. For outdoor bin temperatures where $T_o(T_j)$ is equal to or greater than T_{CC} (the maximum supply temperature determined according to section 3.1.9 of this appendix), determine $\dot{Q}_h(T_j)$ and $\dot{E}_h(T_j)$ as specified in section 4.2.1 of this appendix (*i.e.*, $\dot{Q}_h(T_j) = \dot{Q}_{hp}(T_j)$ and $\dot{E}_{hp}(T_j) = \dot{E}_{hp}(T_j)$). Note: Even though $T_o(T_j) \geq T_{cc}$, resistive heating may be required; evaluate Equation 4.2.1–2 for all bins.

Case 2. For outdoor bin temperatures where $T_o(T_j) > T_{cc}$, determine $\dot{Q}_h(T_j)$ and $\dot{E}_h(T_j)$ using,

$$\dot{Q}_h(T_j) = \dot{Q}_{hp}(T_j) + \dot{Q}_{CC}(T_j) \qquad \dot{E}_h(T_j) = \dot{E}_{hp}(T_j) + \dot{E}_{CC}(T_j)$$

where,

$$\dot{Q}_{CC}(T_j) = \dot{m}_{da} * C_{p,da} * [T_{CC} - T_O(T_j)] \qquad \dot{E}_{CC}(T_j) = \frac{\dot{Q}_{CC}(T_j)}{3.413 \frac{Btu/h}{W}}$$

Note: Even though $T_o(T_j) < T_{cc}$, additional resistive heating may be required; evaluate Equation 4.2.1–2 for all bins.

4.2.5.2 Heat Pump Having a Heat Comfort Controller: Additional Steps for Calculating the HSPF of a Heat Pump Having a Single-Speed Compressor and a Variable-Speed, Variable-Air-Volume-Rate Indoor Blower

Calculate the space heating capacity and electrical power of the heat pump without the heat comfort controller being active as specified in section 4.2.2 of this appendix (Equations 4.2.2–1 and 4.2.2–2) for each outdoor bin temperature, T_j, that is listed in Table 19. Denote these capacities and electrical powers by using the subscript "hp" instead of "h." Calculate the mass flow rate (expressed in pounds-mass of dry air per hour) and the specific heat of the indoor air (expressed in Btu/lbm$_{da}$ · °F) from the results of the H1$_2$ test using:

$$\dot{m}_{da} = \overline{\dot{V}_s} * 0.075 \frac{lbm_{da}}{ft^3} * \frac{60_{min}}{hr} = \frac{\overline{\dot{V}}_{mx}}{v_n' * [1 + W_n]} * \frac{60_{min}}{hr} = \frac{\overline{\dot{V}}_{mx}}{v_n} * \frac{60_{min}}{hr}$$

$$C_{p,da} = 0.24 + 0.444 * W_n$$

where $\overline{\dot{V}}_S$, $\overline{\dot{V}}_{mx}$, v'_n (or v_n), and W_n are defined following Equation 3–1. For each outdoor bin temperature listed in Table 19, calculate the nominal temperature of the air leaving the heat pump condenser coil using,

$$T_0(T_j) = 70°\text{F} + \frac{\dot{Q}_{hp}(T_j)}{\dot{m}_{da} * C_{p,da}}$$

Evaluate $e_h(T_j)/N$, $RH(T_j)/N$, $X(T_j)$, PLF_j, and $\delta(T_j)$ as specified in section 4.2.1 of this appendix with the exception of replacing references to the H1C test and section 3.6.1 of this appendix with the H1C$_1$ test and section 3.6.2 of this appendix. For each bin calculation, use the space heating capacity and electrical power from Case 1 or Case 2, whichever applies.

Case 1. For outdoor bin temperatures where $T_o(T_j)$ is equal to or greater than T_{CC} (the maximum supply temperature determined according to section 3.1.9 of this appendix), determine $\dot{Q}_h(T_j)$ and $\dot{E}_h(T_j)$ as specified in section 4.2.2 of this appendix (*i.e.* $\dot{Q}_h(T_j) = \dot{Q}_{hp}(T_j)$ and $\dot{E}_h(T_j) = \dot{E}_{hp}(T_j)$).

Note: Even though $T_o(T_j) \geq T_{CC}$, resistive heating may be required; evaluate Equation 4.2.1–2 for all bins.

Case 2. For outdoor bin temperatures where $T_o(T_j) < T_{CC}$, determine $\dot{Q}_h(T_j)$ and $\dot{E}_h(T_j)$ using,

$\dot{Q}_h(T_j) = \dot{Q}_h(T_j)\ \dot{E}_h(T_j) = \dot{E}_{hp}(T_j)\ \dot{E}_{CC}(T_j)$

Where,

$$\dot{Q}_{CC}(T_j) = \dot{m}_{da} * C_{p,da} * [T_{CC} - T_0(T_j)] \qquad \dot{E}_{CC}(T_j) = \frac{\dot{Q}_{CC}(T_j)}{3.413 \frac{Btu/h}{W}}$$

Note: Even though $T_o(T_j) < T_{cc}$, additional resistive heating may be required; evaluate Equation 4.2.1–2 for all bins.

4.2.5.3 Heat Pumps Having a Heat Comfort Controller: Additional Steps for Calculating the HSPF of a Heat Pump Having a Two-Capacity Compressor

Calculate the space heating capacity and electrical power of the heat pump without the heat comfort controller being active as specified in section 4.2.3 of this appendix for both high and low capacity and at each outdoor bin temperature, T_j, that is listed in Table 19. Denote these capacities and electrical powers by using the subscript "hp" instead of "h." For the low capacity case, calculate the mass flow rate (expressed in pounds-mass of dry air per hour) and the specific heat of the indoor air (expressed in Btu/lbm$_{da}$ · °F) from the results of the H1$_1$ test using:

$$\dot{m}_{da}^{k=1} = \overline{\dot{V}_s} * 0.075 \frac{lbm_{da}}{ft^3} * \frac{60_{min}}{hr} = \frac{\overline{\dot{V}}_{mx}}{v_n' * [1 + W_n]} * \frac{60_{min}}{hr} = \frac{\overline{\dot{V}}_{mx}}{v_n} * \frac{60_{min}}{hr}$$

$$C_{p,da}^{k=1} = 0.24 + 0.444 * W_n$$

where $\overline{\dot{V}}_s$, $\overline{\dot{V}}_{mx}$, v'_n (or v_n), and W_n are defined following Equation 3–1. For each outdoor bin temperature listed in Table 19, calculate the nominal temperature of the air leaving the heat pump condenser coil when operating at low capacity using,

$$T_0^{k=1}(T_j) = 70°\text{F} + \frac{\dot{Q}_{hp}^{k=1}(T_j)}{\dot{m}_{da}^{k=1} * C_{p,da}^{k=1}}$$

Repeat the above calculations to determine the mass flow rate ($\dot{m}_{da}^{k=2}$) and the specific heat of the indoor air ($C_{p,da}^{k=2}$) when operating at high capacity by using the results of the H1$_2$ test. For each outdoor bin temperature listed in Table 19, calculate the nominal temperature of the air leaving the heat pump condenser coil when operating at high capacity using,

$$T_0^{k=2}(T_j) = 70°\text{F} + \frac{\dot{Q}_{hp}^{k=2}(T_j)}{\dot{m}_{da}^{k=2} * C_{p,da}^{k=2}}$$

Evaluate $e_h(T_j)/N$, $RH(T_j)/N$, $X^{k=1}(T_j)$, and/or $X^{k=2}(T_j)$, PLF_j, and $\delta'(T_j)$ or $\delta''(T_j)$ as specified in section 4.2.3.1. 4.2.3.2, 4.2.3.3, or 4.2.3.4 of this appendix, whichever applies, for each temperature bin. To evaluate these quantities, use the low-capacity space heating capacity and the low-capacity electrical power from Case 1 or Case 2, whichever applies; use the high-capacity space heating capacity and the high-capacity electrical power from Case 3 or Case 4, whichever applies.

Case 1. For outdoor bin temperatures where $T_o^{k=1}(T_j)$ is equal to or greater than T_{CC} (the maximum supply temperature determined according to section 3.1.9 of this appendix), determine $\dot{Q}_h^{k=1}(T_j)$ and $\dot{E}_h^{k=1}(T_j)$ as specified in section 4.2.3 of this appendix (*i.e.*, $\dot{Q}_h^{k=1}(T_j) = \dot{Q}_{hp}^{k=1}(T_j)$ and $\dot{E}_h^{k=1}(T_j) = \dot{E}_{hp}^{k=1}(T_j)$).

Note: Even though $T_o^{k=1}(T_j) \geq T_{CC}$, resistive heating may be required; evaluate $RH(T_j)/N$ for all bins.

Case 2. For outdoor bin temperatures where $T_o^{k=1}(T_j) < T_{CC}$, determine $\dot{Q}_h^{k=1}(T_j)$ and $\dot{E}_h^{k=1}(T_j)$ using,

$$\dot{Q}_h^{k=1}(T_j) = \dot{Q}_{hp}^{k=1}(T_j) + \dot{Q}_{CC}^{k=1}(T_j) \qquad \dot{E}_h^{k=1}(T_j) = \dot{E}_{hp}^{k=1}(T_j) + \dot{E}_{CC}^{k=1}(T_j)$$

where,

$$\dot{Q}_{CC}^{k=1}(T_j) = \dot{m}_{da}^{k=1} * C_{p,da}^{k=1} * [T_{CC} - T_0^{k=1}(T_j)] \qquad \dot{E}_{CC}^{k=1}(T_j) = \frac{\dot{Q}_{CC}^{k=1}(T_j)}{3.413\frac{Btu/h}{W}}$$

Note: Even though $T_o^{k=1}(T_j) \geq T_{cc}$, additional resistive heating may be required; evaluate $RH(T_j)/N$ for all bins.

Case 3. For outdoor bin temperatures where $T_o^{k=2}(T_j)$ is equal to or greater than T_{CC}, determine $\dot{Q}_h^{k=2}(T_j)$ and $\dot{E}_h^{k=2}(T_j)$ as specified in section 4.2.3 of this appendix (*i.e.*, $\dot{Q}_h^{k=2}(T_j) = \dot{Q}_{hp}^{k=2}(T_j)$ and $\dot{E}_h^{k=2}(T_j) = \dot{E}_{hp}^{k=2}(T_j)$).

Note: Even though $T_o^{k=2}(T_j) < T_{CC}$, resistive heating may be required; evaluate $RH(T_j)/N$ for all bins.

Case 4. For outdoor bin temperatures where $T_o^{k=2}(T_j) < T_{CC}$, determine $\dot{Q}_h^{k=2}(T_j)$ and $\dot{E}_h^{k=2}(T_j)$ using,

$$\dot{Q}_h^{k=2}(T_j) = \dot{Q}_{hp}^{k=2}(T_j) + \dot{Q}_{CC}^{k=2}(T_j) \qquad \dot{E}_h^{k=2}(T_j) = \dot{E}_{hp}^{k=2}(T_j) + \dot{E}_{CC}^{k=2}(T_j)$$

where,

$$\dot{Q}_{CC}^{k=2}(T_j) = \dot{m}_{da}^{k=2} * C_{p,da}^{k=2} * [T_{CC} - T_0^{k=2}(T_j)] \qquad \dot{E}_{CC}^{k=2}(T_j) = \frac{\dot{Q}_{CC}^{k=2}(T_j)}{3.413\frac{Btu/h}{W}}$$

Note: Even though $T_o^{k=2}(T_j) < T_{cc}$, additional resistive heating may be required; evaluate $RH(T_j)/N$ for all bins.

4.2.5.4 Heat pumps Having a Heat Comfort Controller: Additional Steps for Calculating the HSPF of a Heat Pump Having a Variable-Speed Compressor [Reserved]

4.2.6 Additional Steps for Calculating the HSPF of a Heat Pump Having a Triple-Capacity Compressor

The only triple-capacity heat pumps covered are triple-capacity, northern heat pumps. For such heat pumps, the calculation of the Eq. 4.2–1 quantities

$$\frac{RH(T_j)}{N} \text{ and } \frac{e_h(T_j)}{N}$$

differ depending on whether the heat pump would cycle on and off at low capacity (section 4.2.6.1 of this appendix), cycle on and off at high capacity (section 4.2.6.2 of this appendix), cycle on and off at booster capacity (section 4.2.6.3 of this appendix), cycle between low and high capacity (section 4.2.6.4 of this appendix), cycle between high and booster capacity (section 4.2.6.5 of this appendix), operate continuously at low capacity (section 4.2.6.6 of this appendix), operate continuously at high capacity (section 4.2.6.7 of this appendix), operate continuously at booster capacity (section 4.2.6.8 of this appendix), or heat solely using resistive heating (also section 4.2.6.8 of this appendix) in responding to the building load. As applicable, the manufacturer must supply information regarding the outdoor temperature range at which each stage of compressor capacity is active. As an informative example, data may be submitted in this manner: At the low (k=1) compressor capacity, the outdoor temperature range of operation is 40 °F ≤ T ≤ 65 °F; At the high (k=2) compressor capacity, the outdoor temperature range of operation is 20 °F ≤ T ≤ 50 °F; At the booster (k=3) compressor capacity, the outdoor temperature range of operation is − 20 °F ≤ T ≤ 30 °F.

a. Evaluate the space heating capacity and electrical power consumption of the heat pump when operating at low compressor capacity and outdoor temperature Tj using the equations given in section 4.2.3 of this appendix for $\dot{Q}_h^{k=1}(T_j)$ and $\dot{E}_h^{k=1}(T_j)$) In evaluating the section 4.2.3 equations, Determine $\dot{Q}_h^{k=1}(62)$ and $\dot{E}_h^{k=1}(62)$ from the $H0_1$ test, $\dot{Q}_h^{k=1}(47)$ and $\dot{E}_h^{k=1}(47)$ from the $H1_1$ test, and $\dot{Q}_h^{k=2}(47)$ and $\dot{E}_h^{k=2}(47)$ from the $H1_2$ test. Calculate all four quantities as specified in section 3.7 of this appendix. If, in accordance with section 3.6.6 of this appendix, the $H3_1$ test is conducted, calculate $\dot{Q}_h^{k=1}(17)$ and $\dot{E}_h^{k=1}(17)$ as specified in section 3.10 of this appendix and determine $\dot{Q}_h^{k=1}(35)$ and $\dot{E}_h^{k=1}(35)$ as specified in section 3.6.6 of this appendix.

b. Evaluate the space heating capacity and electrical power consumption ($\dot{Q}_h^{k=2}(T_j)$ and $\dot{E}_h^{k=2}(T_j)$) of the heat pump when operating at high compressor capacity and outdoor temperature Tj by solving Equations 4.2.2–3 and 4.2.2–4, respectively, for k=2. Determine $\dot{Q}_h^{k=1}(62)$ and $\dot{E}_h^{k=1}(62)$ from the $H0_1$ test, $\dot{Q}_h^{k=1}(47)$ and $\dot{E}_h^{k=1}(47)$ from the $H1_1$ test, and $\dot{Q}_h^{k=2}(47)$ and $\dot{E}_h^{k=2}(47)$ from the $H1_2$ test, evaluated as specified in section 3.7 of this appendix. Determine the equation input for $\dot{Q}_h^{k=2}(35)$ and $\dot{E}_h^{k=2}(35)$ from the $H2_2$ test evaluated as specified in section 3.9.1 of this appendix. Also, determine $\dot{Q}_h^{k=2}(17)$ and $\dot{E}_h^{k=2}(17)$ from the $H3_2$ test, evaluated as specified in section 3.10 of this appendix.

c. Evaluate the space heating capacity and electrical power consumption of the heat pump when operating at booster compressor capacity and outdoor temperature Tj using

$$\dot{Q}_h^{k=3}(T_j) = \begin{cases} \dot{Q}_h^{k=3}(17) + \dfrac{\left[\dot{Q}_h^{k=3}(35) - \dot{Q}_h^{k=3}(17)\right] * (T_j - 17)}{35 - 17}, & if\ 17\ °\mathrm{F} < T_j \leq 45\ °\mathrm{F} \\ \dot{Q}_h^{k=3}(2) + \dfrac{\left[\dot{Q}_h^{k=3}(17) - \dot{Q}_h^{k=3}(2)\right] * (T_j - 2)}{17 - 2}, & if\ T_j\ \leq 17\ °\mathrm{F} \end{cases}$$

$$\dot{E}_h^{k=3}(T_j)$$

$$= \begin{cases} \dot{E}_h^{k=3}(17) + \dfrac{\left[\dot{E}_h^{k=3}(35) - \dot{E}_h^{k=3}(17)\right] * (T_j - 17)}{35 - 17}, & if\ 17\ °\mathrm{F} < T_j \leq 45\ °\mathrm{F} \\ \dot{E}_h^{k=3}(2) + \dfrac{\left[\dot{E}_h^{k=3}(17) - \dot{E}_h^{k=3}(2)\right] * (T_j - 2)}{17 - 2}, & if\ T_j\ \leq 17\ °\mathrm{F} \end{cases}$$

Determine $\dot{Q}_h{}^{k=3}(17)$ and $\dot{E}_h{}^{k=3}(17)$ from the $H3_3$ test and determine $\dot{Q}_h{}^{k=2}(2)$ and $\dot{E}_h{}^{k=3}(2)$ from the $H4_3$ test. Calculate all four quantities as specified in section 3.10 of this appendix. Determine the equation input for $\dot{Q}_h{}^{k=3}(35)$ and $\dot{E}_h{}^{k=3}(35)$ as specified in section 3.6.6 of this appendix.

4.2.6.1 Steady-state Space Heating Capacity when Operating at Low Compressor Capacity is Greater than or Equal to the Building Heating Load at Temperature T_j, $\dot{Q}_h{}^{k=1}(T_j) \geq BL(T_j)$., and the Heat Pump Permits Low Compressor Capacity at T_j. Evaluate the quantities

$$\frac{RH(T_j)}{N} \quad \text{and} \quad \frac{e_h(T_j)}{N}$$

using Eqs. 4.2.3–1 and 4.2.3–2, respectively. Determine the equation inputs $X^{k=1}(T_j)$, PLF_j, and $\delta'(T_j)$ as specified in section 4.2.3.1. In calculating the part load factor, PLF_j, use the low-capacity cyclic-degradation coefficient $C_D{}^h$, [or equivalently, $C_D{}^h(k=1)$] determined in accordance with section 3.6.6 of this appendix.

4.2.6.2 Heat Pump Only Operates at High (k=2) Compressor Capacity at Temperature T_j and its Capacity is Greater than or Equal to the Building Heating Load, $BL(T_j) < \dot{Q}_h{}^{k=2}(T_j)$. Evaluate the quantities

$$\frac{RH(T_j)}{N} \quad \text{and} \quad \frac{e_h(T_j)}{N}$$

as specified in section 4.2.3.3 of this appendix. Determine the equation inputs $X^{k=2}(T_j)$, PLF_j, and $\delta'(T_j)$ as specified in section 4.2.3.3 of this appendix. In calculating the part load factor, PLF_j, use the high-capacity cyclic-degradation coefficient, $C_D{}^h(k=2)$ determined in accordance with section 3.6.6 of this appendix.

4.2.6.3 Heat Pump Only Operates at High (k=3) Compressor Capacity at Temperature T_j and its Capacity is Greater than or Equal to the Building Heating Load, $BL(T_j) \leq \dot{Q}_h{}^{k=3}(T_j)$.

Calculate $\dfrac{RH(T_j)}{N}$ and using Eq. 4.2.3-2. Evaluate $\dfrac{e_h(T_j)}{N}$ using

$$\frac{e_h(T_j)}{N} = \frac{X^{k=3}(T_j) * \dot{E}_h^{k=3}(T_j) * \delta'(T_j)}{PLF_j} * \frac{n_j}{N}$$

Where:

$X^{k=3}(T_j) = BL(T_j)/\dot{Q}_h{}^{k=3}(T_j)$ and $PLF_j = 1 - C^h{}_D(k=3) * [1 - X^{k=3}(T_j)]$

Determine the low temperature cut-out factor, $\delta'(T_j)$, using Eq. 4.2.3–3. Use the booster-capacity cyclic-degradation coefficient, $C_D{}^h(k=3)$ determined in accordance with section 3.6.6 of this appendix.

4.2.6.4 Heat Pump Alternates Between High (k=2) and Low (k=1) Compressor Capacity to Satisfy the Building Heating Load at a Temperature T_j, $\dot{Q}_h{}^{k=1}(T_j) < BL(T_j) < \dot{Q}_h{}^{k=2}(T_j)$. Evaluate the quantities

$$\frac{RH(T_j)}{N} \quad \text{and} \quad \frac{e_h(T_j)}{N}$$

as specified in section 4.2.3.2 of this appendix. Determine the equation inputs $X^{k=1}(T_j)$, $X^{k=2}(T_j)$, and $\delta'(T_j)$ as specified in section 4.2.3.2 of this appendix.

4.2.6.5 Heat Pump Alternates Between High (k=2) and Booster (k=3) Compressor Capacity to Satisfy the Building Heating Load at a Temperature T_j, $\dot{Q}_h{}^{k=2}(T_j) < BL(T_j) < \dot{Q}_h{}^{k=3}(T_j)$.

Calculate $\dfrac{RH(T_j)}{N}$ and using Eq. 4.2.3-2. Evaluate $\dfrac{e_h(T_j)}{N}$ using

$$\frac{e_h(T_j)}{N} = [X^{k=2}(T_j) * \dot{E}_h^{k=2}(T_j) + X^{k=3}(T_j) * \dot{E}_h^{k=3}(T_j)] * \delta'(T_j) * \frac{n_j}{N}$$

where:

$$X^{k=2}(T_j) = \frac{\dot{Q}_h^{k=3}(T_j) - BL(T_j)}{\dot{Q}_h^{k=3}(T_j) - \dot{Q}_h^{k=2}(T_j)}$$

and $X^{k=3}(T_j) = X^{k=2}(T_j)$ = the heating mode, booster capacity load factor for temperature bin j, dimensionless. Determine the low temperature cut-out factor, $\delta'(T_j)$, using Eq. 4.2.3–3.

4.2.6.6 Heat Pump Only Operates at Low (k=1) Capacity at Temperature T_j and its Capacity is less than the Building Heating Load, $BL(T_j) > \dot{Q}_h^{k=1}(T_j)$.

$$\frac{e_h(T_j)}{N} = \dot{E}_h^{k=1}(T_j) * \delta'(T_j) * \frac{n_j}{N} \quad \text{and} \quad \frac{RH(T_j)}{N} = \frac{BL(T_j) - [\dot{Q}_h^{k=1}(T_j) * \delta'(T_j)]}{3.413\frac{Btu/h}{W}} * \frac{n_j}{N}$$

where the low temperature cut-out factor, $\delta'(Tj)$, is calculated using Eq. 4.2.3–3.

4.2.6.7 Heat Pump Only Operates at High (k = 2) Capacity at Temperature Tj and its Capacity is less than the Building Heating Load, $BL(Tj) > \dot{Q}_h^{k=2}(T_j)$.

Evaluate the quantities

$$\frac{RH(T_j)}{N} \quad \text{and} \quad \frac{e_h(T_j)}{N}$$

as specified in section 4.2.3.4 of this appendix. Calculate $\delta''(Tj)$ using the equation given in section 4.2.3.4 of this appendix.

4.2.6.8 Heat Pump Only Operates at Booster (k = 3) Capacity at Temperature Tj and its Capacity is less than the Building Heating Load, $BL(T_j) > \dot{Q}_h^{k=3}(T_j)$ or the System Converts to using only Resistive Heating.

$$\frac{e_h(T_j)}{N} = \dot{E}_h^{k=3}(T_j) * \delta'(T_j) * \frac{n_j}{N} \quad \text{and} \quad \frac{RH(T_j)}{N} = \frac{BL(T_j) - [\dot{Q}_h^{k=3}(T_j) * \delta'(T_j)]}{3.413\frac{Btu/h}{W}} * \frac{n_j}{N}$$

where $\delta''(Tj)$ is calculated as specified in section 4.2.3.4 of this appendix if the heat pump is operating at its booster compressor capacity. If the heat pump system converts to using only resistive heating at outdoor temperature T_j, set $\delta'(T_j)$ equal to zero.

4.2.7 Additional Steps for Calculating the HSPF of a Heat Pump having a Single Indoor Unit with Multiple Indoor Blowers. The calculation of the Eq. 4.2–1 quantities $e_h(T_j)/N$ and $RH(T_j)/N$ are evaluated as specified in the applicable subsection.

4.2.7.1 For Multiple Indoor Blower Heat Pumps that are Connected to a Singular, Single-speed Outdoor Unit.

a. Calculate the space heating capacity, $\dot{Q}_h^{k=1}(Tj)$, and electrical power consumption, $\dot{E}_h^{k=1}(Tj)$, of the heat pump when operating at the heating minimum air volume rate and outdoor temperature T_j using Eqs. 4.2.2–3 and 4.2.2–4, respectively. Use these same equations to calculate the space heating capacity, $\dot{Q}_h^{k=2}(Tj)$ and electrical power consumption, $\dot{E}_h^{k=2}(Tj)$, of the test unit when operating at the heating full-load air volume rate and outdoor temperature T_j. In evaluating Eqs. 4.2.2–3 and 4.2.2–4, determine the quantities $\dot{Q}_h^{k=1}(47)$ and $\dot{E}_h^{k=1}(47)$ from the $H1_1$ test; determine $\dot{Q}_h^{k=2}(47)$ and $\dot{E}_h^{k=2}(47)$ from the $H1_2$ test. Evaluate all four quantities according to section 3.7 of this appendix. Determine the quantities $\dot{Q}_h^{k=1}(35)$ and $\dot{E}_h^{k=1}(35)$ as specified in section 3.6.2 of this appendix. Determine $\dot{Q}_h^{k=2}(35)$ and $\dot{E}_h^{k=2}(35)$ from the $H2_2$ frost accumulation test as calculated according to section 3.9.1 of this appendix. Determine the quantities $\dot{Q}_h^{k=1}(17)$ and $\dot{E}_h^{k=1}(17)$ from the $H3_1$ test, and $\dot{Q}_h^{k=2}(17)$ and $\dot{E}_h^{k=2}(17)$ from the $H3_2$ test. Evaluate all four quantities according to section 3.10 of this appendix. Refer to section 3.6.2 and Table 11 of this appendix for additional information on the referenced laboratory tests.

b. Determine the heating mode cyclic degradation coefficient, C_D^h, as per sections 3.6.2 and 3.8 to 3.8.1 of this appendix. Assign this same value to $C_D^h(k = 2)$.

c. Except for using the above values of $\dot{Q}_h^{k=1}(Tj)$, $\dot{E}_h^{k=1}(Tj)$, $\dot{Q}_h^{k=2}(Tj)$, $\dot{E}_h^{k=2}(Tj)$, C_D^h, and $C_D^h(k = 2)$, calculate the quantities $e_h(T_j)/N$ as specified in section 4.2.3.1 of this appendix for cases where $\dot{Q}_h^{k=1}(Tj) \geq BL(T_j)$. For all other outdoor bin temperatures, T_j, calculate $e_h(Tj)/N$ and $RH_h(Tj)/N$ as specified in section 4.2.3.3 of this appendix if $\dot{Q}_h^{k=2}(Tj) > BL(Tj)$ or as specified in section 4.2.3.4 of this appendix if $\dot{Q}_h^{k=2}(Tj) \leq BL(T_j)$.

4.2.7.2 For Multiple Indoor Blower Heat Pumps Connected to either a Single Outdoor Unit with a Two-capacity Compressor or to Two Separate but Identical Model Single-speed Outdoor units. Calculate the quantities $e_h(T_j)/N$ and $RH(T_j)/N$ as specified in section 4.2.3 of this appendix.

4.3 Calculations of Off-Mode Power Consumption

For central air conditioners and heat pumps with a cooling capacity of:

Less than 36,000 Btu/h, determine the off mode represented value, $P_{W,OFF}$, with the following equation:

$$P_{W,OFF} = \frac{P1 + P2}{2};$$

greater than or equal to 36,000 Btu/h, calculate the capacity scaling factor according to:

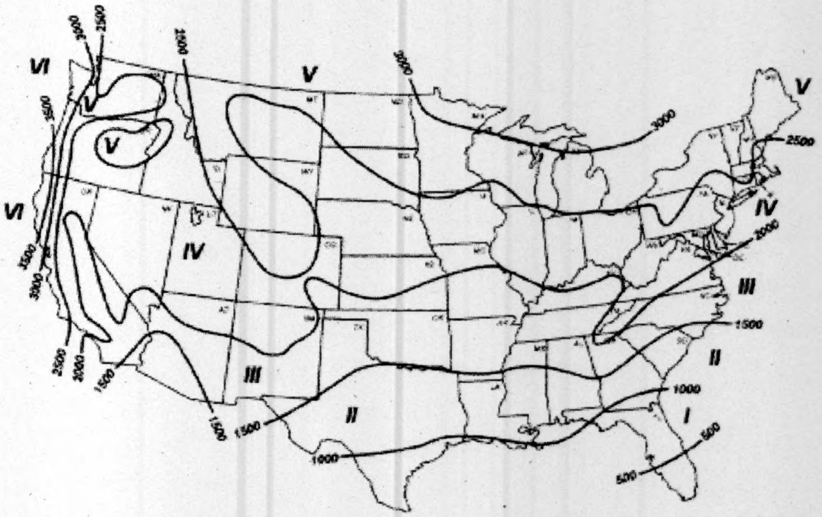
$$F_{scale} = \frac{\dot{Q}_C(95)}{36{,}000},$$

where, $\dot{Q}_C(95)$ is the total cooling capacity at the A or A_2 test condition, and determine the off mode represented value, $P_{W,OFF}$, with the following equation:

$$P_{W,OFF} = \frac{P1 + P2}{2 \times F_{scale}};$$

4.4 Rounding of SEER and HSPF for Reporting Purposes

After calculating SEER according to section 4.1 of this appendix and HSPF according to section 4.2 of this appendix round the values off as specified per § 430.23(m) of title 10 of the Code of Federal Regulations.


VI
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2500
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V
V
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VI
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IV
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I
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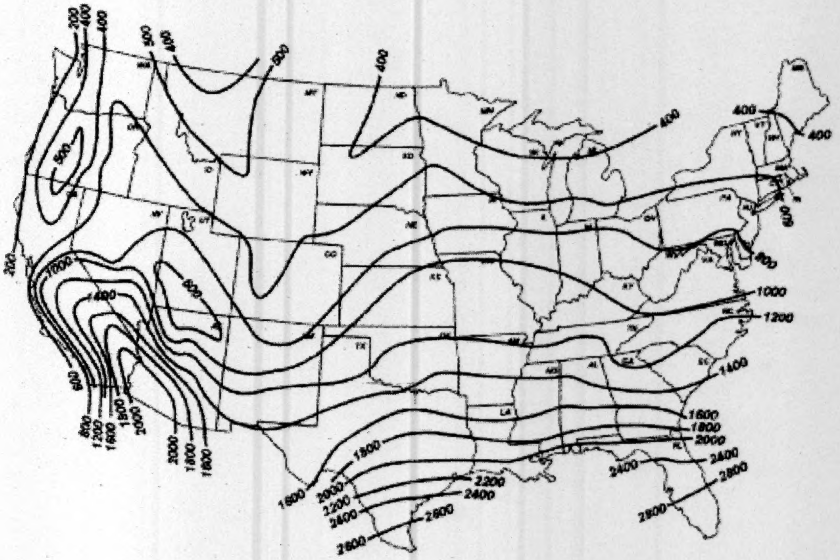
500

Figure 1—Heating Load Hours (HLH_A) for the United States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2800

Figure 2—Cooling Load Hours (CLH_A) for the United States

TABLE 20—REPRESENTATIVE COOLING AND HEATING LOAD HOURS FOR EACH GENERALIZED CLIMATIC REGION

Climatic region	Cooling load hours CLH_R	Heating load hours HLH_R
I	2,400	750
II	1,800	1,250
III	1,200	1,750
IV	800	2,250
Rating Values	1,000	2,080
V	400	2,750
VI	200	2,750

4.5 Calculations of the SHR, Which Should Be Computed for Different Equipment Configurations and Test Conditions Specified in Table 21

TABLE 21—APPLICABLE TEST CONDITIONS FOR CALCULATION OF THE SENSIBLE HEAT RATIO

Equipment configuration	Reference table number of Appendix M	SHR computation with results from	Computed values
Units Having a Single-Speed Compressor and a Fixed-Speed Indoor blower, a Constant Air Volume Rate Indoor blower, or No Indoor blower.	4	B Test	SHR(B).
Units Having a Single-Speed Compressor That Meet the section 3.2.2.1 Indoor Unit Requirements.	5	B2 and B1 Tests	SHR(B1), SHR(B2).
Units Having a Two-Capacity Compressor	6	B2 and B1 Tests	SHR(B1), SHR(B2).
Units Having a Variable-Speed Compressor	7	B2 and B1 Tests	SHR(B1), SHR(B2).

The SHR is defined and calculated as follows:

$$SHR = \frac{Sensible\ Cooling\ Capacity}{Total\ Cooling\ Capacity}$$

$$= \frac{\dot{Q}_{sc}^{k}(T)}{\dot{Q}_{c}^{k}(T)}$$

Where both the total and sensible cooling capacities are determined from the same cooling mode test and calculated from data collected over the same 30-minute data collection interval.

4.6 Calculations of the Energy Efficiency Ratio (EER)

Calculate the energy efficiency ratio using,

$$EER = \frac{Total\ Cooling\ Capacity}{Total\ Electrical\ Power\ Consumption}$$

$$= \frac{\dot{Q}_{c}^{k}(T)}{\dot{E}_{c}^{k}(T)}$$

where $\dot{Q}_c^k(T)$ and $\dot{E}_c^k(T)$ are the space cooling capacity and electrical power consumption determined from the 30-minute data collection interval of the same steady-state wet coil cooling mode test and calculated as specified in section 3.3 of this appendix. Add the letter identification for each steady-state test as a subscript (*e.g.*, EER_{A_2}) to differentiate among the resulting EER values.

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Part IV

Federal Communications Commission

47 CFR Parts 2, 25, 30, et al.
Use of Spectrum Bands Above 24 GHz for Mobile Radio Services;
Proposed Rule

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 2, 25, 30, and 101

[GN Docket No. 14–177, IB Docket Nos. 15–256 and 97–95, RM–11664, WT Docket No. 10–112; FCC 16–89]

Use of Spectrum Bands Above 24 GHz for Mobile Radio Services

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Federal Communications Commission (Commission or FCC) seeks comment on proposed service rules to allow flexible fixed and mobile uses in additional bands and on refinements to the rules the Commission adopted in FCC 16–89. These refinements include: Providing additional detail on the sharing arrangement the Commission adopted in FCC 16–89 for the 37 GHz band; performance requirements for innovative uses such as Internet of Things (IoT) and machine-to-machine communications; additional issues relating to our mobile spectrum holdings policies; whether antenna height limits are necessary in mmW bands; whether minimum bandwidth scaling factors are necessary for transmitter power limits; whether allowing higher Power Flux Density (PFD) levels for Fixed Satellite Service (FSS) in the 37 and 39 GHz bands would be consistent with terrestrial use of those bands; refining the coordination limits for point-to-point operations; and on sharing analysis and modeling.

DATES: Comments are due on or before September 30, 2016; reply comments are due on or before October 31, 2016.

ADDRESSES: You may submit comments, identified by GN Docket No. 14–177, by any of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Federal Communications Commission's Web site: https://www.fcc.gov/ecfs/.* Follow the instructions for submitting comments.
- *People with Disabilities:* Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by email: *FCC504@fcc.gov,* phone: 202–418–0530 or TTY: 202–418–0432.

For detailed instructions for submitting comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: John Schauble of the Wireless Telecommunications Bureau, Broadband Division, at 202–418–0797 or *John.Schauble@fcc.gov,* Michael Ha of the Office of Engineering and Technology, Policy and Rules Division, at 202–418–2099 or *Michael.Ha@fcc.gov,* or Jose Albuquerque of the International Bureau, Satellite Division, at 202–418–2288 or *Jose.Albuquerque@fcc.gov.*

SUPPLEMENTARY INFORMATION: This is a summary of the *Further Notice of Proposed Rulemaking (FNPRM),* GN Docket No. 14–177, IB Docket Nos. 15–256 and 97–95, RM–11664, WT Docket No. 10–112; FCC 16–89, adopted and released on July 14, 2016. The full text of the *FNPRM* is available for inspection and copying during normal business hours in the FCC Reference Center, 445 12th Street SW., Washington, DC 20554. The document also is available for download over the Internet at *https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-89A1.docx.*

Comment Filing Procedures: You may submit comments, identified by GN Docket No. 14–177, by any of the following methods:

- *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the Commission's Electronic Comment Filing System (ECFS) *https://www.fcc.gov/ecfs/* or the Federal eRulemaking Portal: *http://www.regulations.gov.* Filers should follow the instructions provided on the Commission's Web site for submitting comments and transmit one electronic copy of the filing to GN Docket No. 14–177. For ECFS filers, in completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket number.
- Parties may also submit an electronic comment by Internet email. To get filing instructions, filers should send an email to *ecfs@fcc.gov,* and include the following words in the body of the message, "get form your email address". A sample form and instructions will be sent in response.
- *Paper Filers:* Parties who choose to file by paper must file an original and four copies of reach filing. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St. SW., Room TW–A325, Washington, DC 20554. All hand deliveries must be held together with rubber bands or fasteners. The filing hours are 8:00 a.m. to 7 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 E. Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority must be addressed to 445 12th Street SW., Washington, DC 20554.

Ex Parte Rules—Permit-But-Disclose

Pursuant to Section 1.1200(a) of the Commission's rules, this *FNPRM* shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must: (1) List all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.,* .doc,

.xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

Initial Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this present IRFA of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in the attached *FNPRM*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines specified in the *FNPRM* for comments. The Commission will send a copy of this *FNPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).

Paperwork Reduction Analysis

This document does not contain new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104–13.

Synopsis

1. This *FNPRM* has two sections that the Commission is seeking comment. First, the Commission proposes to adopt service rules allowing flexible fixed and mobile uses in additional bands. These bands potentially offer 17.7 GHz of spectrum that could be available for fixed or mobile use. By examining the suitability for mobile use of such a large amount of spectrum, the Commission takes steps to ensure that additional spectrum is available to allow the next generation of wireless technologies to flourish in the mmW bands. In addition, many of these bands will require sharing solutions to unlock their potential for flexible use services—the Commission seeks comment on the potential sharing mechanisms, and continue to encourage all stakeholders to work to develop and refine effective solutions to sharing. Second, the Commission seeks further comment on refinements to the rules the Commission adopted in the *Report and Order* in GN Docket No. 14–177, IB Docket Nos. 15–256 and 97–95, RM–11664, WT Docket No. 10–112; FCC 16–89, adopted and released on July 14, 2016 (hereinafter *Order* or *Report and Order*). In particular, the Commission seeks comment on: (1) Providing additional detail on the sharing arrangement that the Commission adopted in the *Order* for the 37 GHz band; (2) performance requirements for innovative uses such as IoT and machine-to-machine communications; (3) additional issues relating to our mobile spectrum holdings policies; (4) whether antenna height limits are necessary in mmW bands; (5) whether minimum bandwidth scaling factors are necessary for transmitter power limits; (6) whether allowing higher PFD levels for FSS in the 37 and 39 GHz bands would be consistent with terrestrial use of those bands; (7) refining the coordination limits for point-to-point operations; and (8) on sharing analysis and modeling.

2. In the *Order*, several commenters ask the Commission to consider other bands for mobile use. Many commenters argue that the criteria should not preclude the Commission from considering bands that do not meet all of those criteria. For example, CTIA and Nokia ask the Commission to consider bands that do not have 500 MHz of spectrum because certain applications may be feasible for smaller bandwidths. Commenters also agree that while international harmonization is preferable, the Commission should not preclude bands from further consideration just because they are not proposed for mobile use throughout the world.

3. Several factors lead us to conclude that it is now appropriate to consider additional bands for mobile use. First, as the record to the *Report and Order* has made clear, there are a wide variety of services, including fixed, mobile, and satellite, for which these bands could be used. This variety favors making multiple bands available, including bands for which the Commission did not to propose service rules in the *NPRM* (*see In the Matter of Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, Notice of Proposed Rulemaking,* 30 FCC Rcd 11878 (2015)). Second, the World Radio Conference identified a large number of bands as candidate bands for IMT–2020 (International Mobile Telecommunications), including several bands that the Commission did not address in the *NPRM*. Third, it appears that the amount of global data traffic will continue to grow exponentially. Cisco estimates that global mobile data traffic will grow nearly tenfold between 2014 and 2019. Under these circumstances, the Commission believes it is now appropriate to seek comment on proposing mobile service rules for most of the bands identified at the 2015 World Radio Conference.

4. Specifically, the Commission proposes authorizing flexible use licenses that would permit fixed and mobile services in the following bands: 24.25–24.45 GHz and 24.75–25.25 GHz, 31.8–33.4 GHz, 42–42.5 GHz, 47.2–50.2 GHz, 50.4–52.6 GHz, 71–76 GHz, and 81–86 GHz. Each of these bands was identified as a candidate band for IMT–2020.

5. At the same time, the Commission recognizes that there are challenges that must be overcome before the Commission can authorize service in these bands, including existing allocations and/or operations in these bands. The Commission will continue to work with existing stakeholders, wireless providers, the satellite industry, National Telecommunications and Information Administration (NTIA), and other interested Federal stakeholders to determine where different services can coexist and develop ways to maximize flexible use. In several bands, the Commission believes sharing mechanisms that the Commission has adopted in the *Report and Order* and in other proceedings can allow many of these bands to be utilized for fixed and mobile use while also accommodating existing uses.

6. The Commission discusses each of the bands in additional detail below. The Commission generally proposes to use the licensing and service rule framework the Commission adopted in the *Order*. Except for the 71–76 GHz, and 81–86 GHz bands, the Commission proposes to use geographic area licensing with Partial Economic Area (PEAs) as the license area size. For the 71–76 GHz and 81–86 GHz bands, the Commission proposes to use a licensing framework similar to the framework developed for the Citizens Broadband Radio Service. For any Upper Microwave Flexible Use Service (UMFUS) bands for which the Commission adopts geographic area licensing and accept mutually exclusive initial applications, the Commission has decided to conduct any spectrum auction of licenses in conformity with the general competitive bidding procedures set forth in Part 1 Subpart Q of the Commission's rules, including rules governing designated entity preferences. The Commission seeks comment here on whether to apply the same small business definitions and associated bidding credits the Commission has adopted for auctions of UMFUS licenses to auctions of licenses in the additional bands discussed below, as the Commission seeks any other spectrum bands that the Commission may subsequently decide to include in the UMFUS. Our proposal is based on our anticipation that the same types of services would be deployed in these additional bands as are contemplated to be deployed in the bands that the Commission has already designated for the UMFUS. The

Commission asks commenters to provide specific data on the costs and benefits associated with the licensing mechanisms the Commission has proposed.

7. In the *Order,* the Commission is making 3.85 GHz of mmW spectrum available for licensed mobile use, as well as adding seven gigahertz of spectrum for unlicensed use, bringing the total to 14 GHz of unlicensed spectrum available in the 57–71 GHz band. In view of these relative proportions, the Commission believes it is appropriate to make additional licensed spectrum available for flexible use. Furthermore, the Commission continues to believe there is value in using both geographic area licensing and shared access. The Commission seeks comment on alternative licensing mechanisms for each of these bands, including unlicensed operation. To the extent the Commission adopts geographic area licensing, the Commission also seeks comment on alternative license area sizes.

8. The Commission also proposes to generally apply the Part 30 technical rules the Commission has adopted in the *Order* to each of the bands where the Commission ultimately adopts flexible use rules. The Commission seeks comment on any deviations from those rules or special technical rules that would be needed for any of those bands. Commenters who propose special technical rules should explain the specific need for such rules and quantify the costs and benefits associated with their proposed rules. The Commission also encourages commenters to provide detailed technical analysis supporting any technical proposals.

9. As the Commission explained in the *NPRM,* the Commission believes these bands might be able to support expanded sharing, including two-way shared use between Federal and non-Federal users in these bands and sharing among different types of service platforms. The Commission continues to believe there is an opportunity to leverage the propagation characteristics of these bands to further enhance sharing Federal and non-Federal users. The Commission seeks comment generally on ways to further Federal and non-Federal sharing in these bands, including refinement of the concept the Commission adopted in the *Order* for the 37 GHz band.

A. Additional Bands

1. 24 GHz Bands (24.25–24.45 GHz and 24.75–25.25 GHz)

10. The Commission proposes to add a mobile allocation to the 24.25–24.45 and 24.75–25.25 GHz segments of the 24 GHz band, a fixed allocation to 24.75–25.05 GHz, and to authorize both mobile and fixed operations in those segments under the new Part 30 UMFUS rules. This band is already used internationally for fixed service and is included in the WRC study for future international mobile allocation. The existing manufacturing base and global harmonization of this band make it an attractive option for mobile use. The Commission further proposes to grant mobile rights to the existing fixed licensees, in order to facilitate coordination between fixed and mobile uses in the areas that are currently licensed. The Commission proposes to add these new fixed and mobile authorizations on a co-primary basis. The Commission seeks comment on that arrangement, as well as on the alternative of making mobile or fixed use secondary to FSS.

11. The Commission recognizes that there are existing satellite interests and operations in this band, and the Commission seeks comment on the best way to promote effective sharing between satellite and mobile uses. Given that the current use of the band for satellite appears to be rather limited, should the Commission maintain the existing limits and coordination procedures on satellite operations in the 25.05–25.25 GHz band, and apply those same limits to the 24.75–25.05 GHz band? Alternatively, are there other sharing mechanisms that would better achieve coexistence? Would the sharing regime the Commission has adopted for the 28 GHz band be appropriate in this band, or do the differences between FSS earth stations in that band and BSS feeder links here suggest a different solution?

12. The Commission also proposes to modify the existing band plan for new licenses in the 24 GHz band. Currently, the 24 GHz bands is channelized into five 40 MHz by 40 MHz channel pairs. As with the 39 GHz band, the Commission sees benefits to converting the 24 GHz band plan to unpaired blocks. Going forward, the Commission proposes to license the 24.25–24.45 GHz band segment as a single, unpaired block of 200 MHz, and the 24.75–25.25 GHz band segment as two unpaired blocks of 250 MHz each. The Commission seeks comment on this proposal, as well as the alternative of using 100 MHz unpaired channels, or two 200 MHz channels and one 100 MHz channel in 24.75–25.25 GHz. The Commission also seeks comment on how to treat existing 24 GHz band licensees. Should incumbent licenses be converted to UMFUS licenses, as the Commission has done in 28 GHz and 39 GHz? Also, is it necessary to repack existing licensees, or can they keep their existing frequency assignments because there are so few licensees?

2. 32 GHz Band (31.8–33.4 GHz)

13. The Commission proposes to add primary non-Federal fixed and mobile service allocations to the 32 GHz band *(31.8–33.4 GHz).*[1] The Commission also proposes to authorize fixed and mobile operations in the 32 GHz under the Part 30 Upper Microwave Flexible Use Service rules. In the *NPRM,* the Commission noted that the 32 GHz band is not currently allocated for mobile operations, and therefore, perhaps it is not as suited to the provision of 5G services as other bands under consideration. Since the *NPRM* was adopted, however, ITU WRC–15 decided to conduct the appropriate sharing and compatibility studies for the 32 GHz band, which may lead to an allocation for mobile service in the 32 GHz band at WRC–19 and the opportunity for globally harmonized services in this band. Global harmonization, in turn, will promote global interconnection, roaming, and interoperability. In addition, there is a significant amount of contiguous bandwidth available in the 32 GHz band. Finally, the Commission notes that there is significant support among the commenters to allocate the 32 GHz band for fixed and mobile 5G services.

14. However, there are still two major challenges to authorizing mobile operations in the 32 GHz band: (1) Protecting radionavigation operations in the 32 GHz band; and (2) protecting radio astronomy observations in the adjacent 31.3–31.8 GHz band. The Commission discusses those challenges and invites further comment on those issues below.

a. Federal and Non-Federal Services in the 32 GHz Band

15. In the *NPRM,* the Commission sought comment on the compatibility of mobile use of the 32 GHz band with existing aeronautical and shipborne radar use of the band, future radionavigation and other Federal services, as well as deep space research

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[1] In the *NPRM,* the Commission addressed the 31.8–33 GHz band. Because the ITU identified 31.8–33.4 GHz as a potential candidate band, we will expand our consideration to the 31.8–33.4 GHz band.

in the 31.8–32.3 GHz portion of the 32 GHz band. In the *Order,* commenters did not address these issues directly. Instead, Echodyne, a technology startup, asks the Commission to proceed cautiously to ensure that it does not hinder the development of innovative technologies for the radionavigation bands. Echodyne states that "near term advances in radar technology soon will help fuel revolutionary changes in many sectors." For instance, Echodyne indicates that "accurate, lightweight, and low-power detect and avoid systems will be essential to widespread commercial deployment of Unmanned Aerial Systems and autonomous vehicles," which Echodyne argues, will change the face of transportation, shipping, security, and numerous other industries. According to Echodyne, these advances rely on effective radionavigation operations that need consistent operating conditions across a geographic region, including a predictable and uniform interference environment. Echodyne indicates that it is skeptical that the 32 GHz band could be made available for mobile use.

16. The Commission seeks comment on the compatibility of fixed and mobile services with existing allocated services in the 32 GHz band. In the *Order,* commenters who support mobile use of this band should provide specific technical information and proposals showing how fixed and mobile uses of this band is compatible with radionavigation uses. In that regard, the Commission asks Echodyne and other commenters to provide specific information on existing and planned non-Federal uses of radar in this band. The Commission will continue to work with NTIA and other Federal partners to determine the protection requirements for Federal users and the opportunity to expand shared Federal use across the band.

17. The Commission also seeks comment on protecting other allocated service within the 32 GHz band. For Space Research Service operations in the Goldstone, California area, would coordination requirements be sufficient to protect those operations? In the *NPRM,* the Commission noted that the risk of interference between terrestrial operations and ISS links in 64–71 GHz appeared to be low because of atmospheric absorption. Would the same analysis apply in the 32 GHz band?

b. Radio Astronomy and EESS in the Adjacent 31.3–31.8 GHz Band

18. The 32 GHz band is adjacent to the 31.3–31.8 GHz band. In the United States, the 31.3–31.8 GHz band is allocated for Earth Exploration Satellite (passive), radio astronomy, and Space Research (passive). No station is authorized to transmit in the 31.3–31.8 GHz band and the radio astronomy operations in the 31.3–31.8 GHz band are protected from unwanted emissions only to the extent that such radiation exceeds the level which would be present if the offending station were operating in compliance with the technical standards or criteria applicable to the service in which it operates.

19. In the *NPRM,* the Commission noted that the need to protect the 31.3–31.8 GHz passive band may severely limit the availability of usable spectrum in the 31.8–33 GHz band and sought detailed technical analysis from commenters on the out-of-band emission limits required to protect operations in the 31.3–31.8 GHz band. The Commission indicated that a detailed analysis would help it determine how much of the 31.8–33 GHz band could be used for mobile operations while protecting the passive services in the 31.3–31.8 GHz band.

20. In the *Order,* CORF submitted the most information on this topic. CORF states that although the critical science undertaken by Radio Astronomy observers cannot be performed without access to interference free bands, Radio Astronomy Service (RAS) bands can be protected regionally by limiting emissions within a certain radius of the facility. But, CORF explains, "the emissions that radio astronomers receive are extremely weak—a radio telescope receives less than 1 percent of one-billionth of one-billionth of a watt (10–20 W) from a typical cosmic object." CORF further explains that radio observatories are particularly vulnerable to interference from in-band emissions, spurious and out-of-band emissions from licensed and unlicensed users of neighboring bands, and emissions that produce harmonic signals in the RAS bands, even when those manmade signals are weak and distant. EMEA Satellite Operators Association (ESOA) argues that any deep space research operations in the 31.3–31.8 GHz band can be protected from mobile terrestrial operations in the 32 GHz band because there are very few research facilities and they are located in very remote areas. The Commission seeks specific comment on how the Commission should protect these operations.

21. CORF stresses the importance of the data collected from Earth Exploration Satellite Service (EESS) and that billions of dollars have been invested in EESS satellites. CORF notes that for certain applications, satellite-based microwave remote sensing is the only practical method of obtaining atmospheric and surface data for the entire planet. Data derived from EESS have contributed substantially to the study of meteorology, atmospheric chemistry, climatology, and oceanography and is used by multiple governmental agencies. CORF indicates that incumbent users designed and developed EESS missions without the expectation of transmissions in close proximity to the 31.3–31.8 GHz band. They also report that most incumbent users at 31.5 GHz operate in a direct detection (homodyne) mode. CORF recommends that the Commission adopt adequate guard bands to protect EESS operations in the 31.3–31.8 GHz "until the current satellites can be replaced with satellites with filtering suited to the new spectral environment." CORF claims that proportionally larger guard bands are needed as the frequency increases. In direct detection, CORF explains, band definition is achieved with filters that are limited by the properties of the materials used in the filter itself. Thus, for example, "for a given material, the minimum bandwidth of a filter is proportional to the central frequency, so that the width of the necessary guard bands to suppress emissions to a desired level also increases in proportion to the frequency." CORF continues, "it is impossible to reject a signal 10 MHz away from a band edge at these higher frequencies, so guard bandwidths must be scaled in frequency to accommodate this physical limitation." The Commission seeks comment on whether the Commission should adopt a guard band to protect EESS operations in the 31.3–31.8 GHz band, and if so, how large should the guard band be? ESOA, disagrees with CORF and states that services operating in the 31.3–31.8 GHz band can be protected through "carefully crafted operating requirements." The Commission seeks comment on ESOA's statement and ask what these "carefully crafted operating requirements" might be.

22. CORF also expresses concern that "mobile devices with limited size and cost will not be able to adequately filter their out-of-band emissions to meet the stringent requirements" of the 31.3–31.8 GHz band. Avanti responds that under agenda item 1.13 for WRC–19 (World Radiocommunication Conference), the International Telecommunication Union-Radiocommunication (ITU–R) will develop technical measures, if necessary, to protect passive services from interference from 5G mobile

broadband systems. The Commission seeks detailed information concerning the capability of mobile and other consumer devices to limit out-of-band emissions into the 31.3–31.8 GHz band, and seek comment on whether guard bands or other special rules will be necessary to limit emissions into the 31.3–31.8 GHz band.

c. Band Plan

23. The Commission also seeks comment on the appropriate band plan for the 32 GHz band. The Commission proposes to license the band using channels of either 200 MHz or 400 MHz bandwidth. Given the contemplated use cases and the nature of this band, what channel size would be best? The Commission encourages commenters to discuss the specific advantages and disadvantages of various band plans.

3. 42 GHz Band (42–42.5 GHz)

24. The Commission proposes to authorize fixed and mobile service operations to operate in the 42 GHz band (42–42.5 GHz) under the Part 30 Upper Microwave Flexible Use Service rules, as long as the Commission can ensure that adjacent channel RAS services will be protected. The band potentially offers 500 megahertz for new flexible use services, has existing fixed and mobile allocations, and is being studied internationally for possible mobile use. The Commission also proposes to adopt geographic area licensing using PEAs as the geographic area. The Commission seeks comment on this proposal, as well as alternatives.

25. The Commission denies FWCC's request that the Commission establish service rules to enable fixed service at 42.–42.5 GHz, but keeps its request pending for the 42.5–43.5 GHz band. The Commission believes that flexible use licensing, which would allow a variety of services to be offered, would be more likely to place the spectrum in its highest and best use, as opposed to rules that would only allow point-to-point operation. Nevertheless, the Commission does not deny FWCC's petition with respect to the 42.5–43.5 GHz band because point-to-point operation may be more likely to co-exist with co-channel RAS. The Commission will give further consideration to the 42.5–43.5 GHz band separately.

26. The Commission seeks comment on whether it is possible to authorize fixed and mobile use in the 42 GHz band while protecting RAS observations in the adjacent 42.5–43.5 GHz band. If protection is possible, the Commission seeks comment on what protections should be established. CORF notes that frequency lines at 42.519, 42.821, 43.122, and 43.424 GHz (for observations of silicon monoxide) are among those of greatest importance to radio astronomy. CORF represents, "The detrimental levels for continuum and spectral line radio astronomy observations for single dishes are −227 dBW/m2/Hz and −210 dBW/m2/Hz, respectively, for the average across the full 1 GHz band and the peak level in any single 500 kHz channel. For observations using the entire Very Long Baseline Array (VLBA), the corresponding limit is −175 dBW/m2/Hz." Does the Commission need to establish special out-of-band emission limits into the 42.5–43.5 GHz band? Is it necessary or appropriate to establish a guard band below 42.5 GHz? The Commission asks proponents of terrestrial use in the 42 GHz band to provide detailed studies demonstrating how such use can be compatible with RAS use in the 42.4–43.5 GHz band. The Commission also asks CORF and other radio astronomy interests to provide additional information on the locations where observations are made in the 42.4–43.5 GHz band.

27. The Commission also seeks comment on the appropriate band plan for the 42 GHz band. Should the band be licensed as a single channel, split into two channels, or split into multiple 100 megahertz channels? The Commission recognizes that if the Commission adopts a guard band to protect adjacent channel radio astronomy, the guard band will affect the band plan by making less spectrum available. Given the contemplated use cases and the nature of this band, what channel size would be best? The Commission encourages commenters to discuss the specific advantages and disadvantages of various band plans.

28. Finally, the Commission proposes to add Federal fixed and mobile allocations into this band, and additionally seek comment on establishing a framework under which Federal and non-Federal users could share the band. Given the short propagation distances, lack of incumbent licensees, and other factors, as described in the 37 GHz sharing section and the rules the Commission adopted in the *Report and Order,* the Commission believes it is possible for both Federal and non-Federal users to coexist on a co-primary basis, particularly using simple methods of coordination (to enable geographic sharing). The Commission therefore seeks comment on whether to extend Federal access to this band, including how to best achieve coexistence with non-Federal uses. For instance, are there additional considerations in addition to leveraging the sharing regime adopted for the co-primary coordinated sharing in the 37 GHz band? Should the Commission use more static sharing mechanisms? Would an SAS-based sharing approach facilitate Federal and non-Federal sharing of this band? Are there other tools the Commission can leverage to create a robust sharing environment that allows this spectrum to meet both Federal and non-Federal needs?

4. 47 GHz Band (47.2–50.2 GHz)

29. The Commission proposes to authorize fixed and mobile operations in the 47 GHz band (47.2–50.2 GHz) under the Part 30 Upper Microwave Flexible Use Service rules. The band potentially offers 3 GHz of spectrum and is being studied internationally for possible mobile use.

30. At the same time, the Commission recognizes that this band is authorized for FSS use. While there are no current authorized operations, this band may be paired with the 40–42 GHz downlink band. Unlike in the 28 GHz or 39 GHz bands, where FSS can use other spectrum to operate user equipment, FSS would have to use some portion of the 47 GHz band to operate user equipment. Sharing between terrestrial mobile and FSS user equipment is more complicated, particularly when the FSS user equipment is transmitting.

31. With respect to individually licensed earth stations, it appears that the Commission could adopt the sharing framework the Commission has adopted for the 28 GHz band. Specifically, in each PEA, the Commission proposes that there can be one location where FSS earth stations can be located on a co-primary basis, subject to the conditions and limitations the Commission has adopted in other bands. The Commission seeks comment on this proposal, as well as alternatives.

32. The Commission seeks comment on the best approach for sharing between FSS user equipment and terrestrial operations. One option would be to have geographic area licensing on a PEA basis, but also authorize database-driven sharing between terrestrial licensees and stationary FSS user equipment. In the *NPRM,* the Commission sought comment on leveraging a Spectrum Access System (SAS) or other database coordination mechanism to facilitate sharing between terrestrial operations and FSS user equipment. Under the SAS proposal, terrestrial licensees would provide the geographic coordinates and other pertinent technical information concerning their facilities to the SAS. Satellite operators would then access

the information in the SAS to determine where their user equipment could transmit without causing interference to terrestrial operations. The Commission recognizes that many terrestrial operators oppose being required to provide information on their deployments to a database, but those operators have not presented a viable alternative that would allow sharing between these services.

33. Another option would be to divide the band into a segment where FSS has priority and a segment where UMFUS operations has priority.[2] In the segment where FSS had priority, FSS could operate its user equipment without any obligation to protect UMFUS operations. Conversely, in the segment where UMFUS licensees had priority, satellite user equipment could operate on a purely secondary basis and would be required to cease transmitting if it caused interference to fixed or mobile operations. Supporters of this option should propose a split for the band and explain how their proposed split best balances the needs of UMFUS and FSS licensees.

34. A third option would be to develop specific criteria for assigning priority between FSS and terrestrial operations. For example, the Commission could require both FSS and UMFUS licensees to register their operations in a database, and the Commission could assign interference protection on a first-come, first-served basis. The Commission seeks comment on a first-come, first-served approach, and the Commission also invites commenters to propose alternative criteria for assigning priority. Commenters should provide detailed information on the costs and benefits of their proposed mechanisms for assigning priorities. The Commission also seeks comment on other alternatives for sharing between UMFUS and FSS in this band.

35. The Commission also seeks comment on sharing with co-primary Federal services in the 48.2–50.2 GHz band, as well as protection of passive services in the adjacent 50.2–50.4 GHz band. Our understanding is that there are currently no authorized Federal or non-Federal operations in the 48.2–50.2 GHz band but that there may be future Federal operations in that band. Are the rules and framework the Commission adopted in the *Order* for sharing of the 37 GHz band applicable to the 48.2–50.2 GHz band? Could a modified first-come, first-served mechanism be used to establish priority in this band without precluding use of the band by co-primary Federal users? Should the Commission leverage the database-driven sharing mechanism? The Commission intends to work with NTIA and other Federal agencies to identify an appropriate framework to protect current or planned Federal interests in and ensure future access to this band on a co-primary shared basis. The Commission also seeks comment on protecting radio astronomy in the 48.94–49.04 GHz band. Are there any steps the Commission needs to take to protect radio astronomy over and above implementing the existing prohibition on aeronautical use in that segment? The Commission encourages CORF and other radio astronomy interests to provide information on locations where this band is used for radio astronomy observations. With respect to the 50.2–50.4 GHz band, the Commission notes that the international allocation for the passive services "shall not impose undue constraints on the use of adjacent bands by the primary allocated services in those bands." On the other hand, at WRC–12, the WRC recognized "that long-term protection of the EESS in the [, *inter alia,* 50.2–50.4 GHz band] is vital to weather prediction and disaster management." The WRC did establish emission limits for FSS stations operating in the 49.7–50.2 GHz and 50.4–50.9 GHz bands, but did not address fixed or mobile stations operating in those bands. Given that framework, what requirements would be appropriate to protect passive services in the 50.2–50.4 GHz bands?

36. The Commission also seeks comment on the appropriate band plan for the 47 GHz band. One possibility would be to divide the band into six channels of 500 MHz each. One advantage of that band plan is that the channels would align with 48.2 GHz, which is where the Federal allocation and current FSS designation begin and where FSS user equipment can begin to be deployed. On the other hand, 500 megahertz channels would not align with the band plan in other bands, where the Commission is using multiples of 200 MHz. Given the contemplated use cases and the nature of this band, what channel size would be best? The Commission encourages commenters to discuss the specific advantages and disadvantages of various band plans.

5. 50 GHz Band (50.4–52.6 GHz)

37. The Commission proposes to authorize fixed and mobile operations in the 50 GHz band (50.4–52.6 GHz) under the Part 30 Upper Microwave Flexible Use Service rules. The band potentially offers 2 GHz of spectrum and is being studied internationally for possible mobile use. The Commission also proposes to use geographic area licensing in this band and license the band on a PEA basis. The Commission seeks comment on these proposals, as well as alternatives. The Commission also seeks comment on the non-Federal satellite allocations in the 50.4–51.4 GHz band.[3] Assuming that the 40–42 GHz (space-to-Earth) band is paired with the 48.2–50.2 GHz (Earth-to-space) band, the Commission requests comments on how this uplink band would be used by FSS operators. The Commission also requests comments on means of accommodating sharing between terrestrial and satellite operations.

38. The Commission also seeks comment on sharing with co-primary Federal services in the 50.4–52.6 GHz band, as well as protection of passive services in the adjacent 50.2–50.4 GHz and 52.6–54.25 GHz bands. The Commission's understanding is that there are currently no authorized Federal or non-Federal operations in this band but that there may be future Federal operations in that band. Are the rules and framework the Commission adopted in the *Order* for sharing of the 37 GHz band applicable to this band? Could a database-driven sharing approach facilitate sharing between Federal and non-Federal operations? Could a modified first-come, first-served mechanism be used to establish priority in this band without precluding use of the band by co-primary Federal users? The Commission intends to work with NTIA and other Federal agencies to identify an appropriate framework to protect current or planned Federal interests and to ensure future access to this band on a co-primary shared basis. With respect to the 50.2–50.4 GHz band this band is vital to weather prediction and disaster management, and the international allocation for the passive services "shall not impose undue constraints on the use of adjacent bands by the primary allocated services in those bands." Given that framework, what limits on emissions into the 50.2–50.4 GHz would be appropriate? On the

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[2] The Commission could maintain the current wireless services and FSS designations. When the Commission made the separate designations for the FSS and wireless services in the band, it did not place any restrictions on the use of either portion of the band by either the FSS or wireless services.

[3] The Commission notes that the NATO Joint Frequency Agreement identifies the 39–5–40.5 GHz downlink band and the 50.4–51.4 GHz uplink band for future military FSS and MSS requirements. *See* NTIA letter, IB Docket No. 97–95, received May 7, 1997, at p. 4. *See also* NTIA's Federal Long-Range Spectrum Plan, September 2000, at p. 122 (available at *https://www.ntia.doc.gov/files/ntia/publications/final-1rsp.pdf*).

other hand, there is a specific limit on fixed emissions into the 52.6–54.25 GHz band. What impact will that limit have on the suitability of this band to provide terrestrial service? What limits would be necessary on mobile service to protect the 52.6–54.25 GHz band?

39. The Commission also seeks comment on the appropriate band plan for the 50 GHz band. One option is to establish ten channels of 200 MHz each, which would be consistent with the channel plan for the 39 GHz band. Other options include four channels of 500 megahertz each or five channels of 400 MHz each, with one extra 200 MHz channel. Is there any value in establishing a guard band immediately below 52.6 GHz to protect the passive band above 52.6 GHz? Given the contemplated use cases and the nature of this band, what channel size would be best? The Commission encourages commenters to discuss the specific advantages and disadvantages of the various band plans.

6. 70/80 GHz Bands (71–76 GHz and 81–86 GHz)

40. When evaluating services or uses that could be viable if the Commission authorize their introduction into the 71–76 and 81–86 GHz bands, the Commission must consider three basic issues. First, the Commission needs to consider whether the bands offer adequate spectrum for the proposed new services or uses in bands where tens of thousands of incumbent operations are already registered. Second, the Commission needs to consider whether the new services or uses are compatible with the fundamental electromagnetic characteristics of the relevant spectrum. And third, the Commission needs to consider whether more than one service or use can coexist in the bands. The Commission addresses each of these considerations and corollary concerns below.

41. The *NPRM* posited that it might not be possible to authorize mobile services or unlicensed access in the 71–76 and 81–86 GHz bands without causing interference to incumbent point-to-point links. After further review, the Commission finds that the bands are relatively lightly used both in terms of the number of registered sites (especially on a large geographic scale) and with respect to the quantity of spectrum available. As E-Band Communications notes, "The 10 GHz of spectrum available [in the 71–76 and 81–86 GHz bands] represents by far the most ever allocated by the FCC at any one time, representing 50-times the bandwidth of the entire cellular spectrum." Moreover, the great majority of existing links in the bands are concentrated in just a few localities. As of June 10, 2016, only 16 counties had an average site density of more than one transmission or reception site per square mile, and those 16 counties contain more than 73 percent of all registered transmitters and receivers in the 71–76 and 81–86 GHz bands. Given the narrow beamwidths and limited path lengths involved, it would be reasonable to treat the remaining 3,125 counties and county-equivalents as the functional equivalent of a green field, provided that adequate measures are taken to protect the few incumbents in them.

42. The Commission must also consider whether the physical characteristics of the bands are suitable for the kinds of services that might be authorized in the bands—this is particularly true for mmW bands where atmospheric and other environmental phenomena affect the utility of the band. In general, for example, atmospheric attenuation increases the higher one goes in the electromagnetic spectrum, limiting the potential length of transmission paths. However, the 71–76 and 81–86 GHz bands experience less attenuation than frequencies in the 50–60 GHz range.

43. In addition to atmospheric attenuation, spreading loss also becomes an issue in the mmW bands. As the Friis transmission law states, path loss grows with the square of the frequency, even when radio waves are traveling through a vacuum. The caveat, however, is that Friis's law applies only to transmissions from omnidirectional antennas. As a recent technical study and analysis explains, "[T]he smaller wavelength of mmW signals also enables proportionally greater antenna gain for the same physical antenna size. Consequently, the higher frequencies of mmW signals do not in themselves result in any increased free space propagation loss, provided the antenna area remains fixed and suitable directional transmissions are used." In short, the directionality of the antennas that are feasible at shorter wavelengths may result in less path loss than theorized. Based upon this preliminary analysis, the Commission believes the bands might be valuable for a variety of uses, including mobile as well as fixed uses. In determining whether new and different services can coexist in these bands, the Commission must also look at whether the new service use can be authorized in a manner that does not disrupt the incumbent use (or otherwise, the Commission could decide to disrupt the incumbent use), and whether the existing use can and should continue to expand. Specific to this analysis is whether the current and potential future fixed point-to-point uses of these bands might be compatible with other types of fixed or mobile uses.

44. When evaluating the compatibility between fixed and mobile services in the 70/80 GHz band, one important consideration is the beamwidths of their transmission paths because tighter beams are less likely to cause interference. Historically, the Commission has tried to balance the desire for smaller antennas against the spectrum efficiencies of narrow beamwidths in the 70/80 GHz band. Over the last decade, the Commission has continued to explore modifying the technical rules to allow larger beamwidths. Most recently, on October 13, 2015, WTB's Broadband Division opened a new docket (Public Notice 30 FCC Rcd 10961 (WTB 2015)) to address two waiver requests seeking a further relaxation of antenna standards in the 71–76 and 81–86 GHz bands. As the waiver requests and comments filed in that docket attest, evidence suggests that the Commission might further relax the allowed beamwidth to 2.2 degrees. That step, if taken, would bring the bands' technical standards into a realm that is at least potentially compatible with dynamic beamforming technology because a 2.2-degree beamwidth is also achievable by the kinds of MIMO base stations that will be supporting mmW mobile services. At least when operating with beamforming MIMO, these base stations would likely be able to coexist with conventional point-to-point Fixed Service links.

45. The introduction of fixed services under somewhat relaxed directionality requirements in addition to mmW mobile services pose a new coexistence consideration. It is likely that, when both fixed and mobile mmW services are operated by the same entity, they can sufficiently plan, coordinate, and time their use to facilitate coexistence. In looking at whether incumbent fixed services, new more dynamic fixed services, and potential mobile services (and equipment) in these bands may coexist, it is apparent that the use of a central coordinating database capable of calculating and enforcing protections among different types of users, like a Spectrum Access System, could facilitate this coexistence.

46. Initially, coordination of non-Federal links with Federal operations in the 71–76 GHz, 81–86 GHz, and 92–95 GHz (70/80/90) bands was accomplished under a traditional coordination process: that is, requested non-Federal links were recorded in the Commission's Universal Licensing

System (ULS) database and coordinated with the NTIA through the Interdepartment Radio Advisory Committee (IRAC) Frequency Assignment Subcommittee. However, beginning on February 8, 2005, this interim link registration process was replaced by a permanent process in which third-party database managers are responsible for recording each proposed non-Federal link in the third-party database link system and coordinating with NTIA's automated "green light/yellow light" mechanism to determine the potential for harmful interference with Federal operations. A "green light" response indicates that the link is coordinated with the Federal Government; a "yellow light" response indicates a potential for interference to Federal Government or certain other operations. In the case of a "yellow light," the licensee must file an application for the requested link with the Commission, which in turn will submit the application to IRAC for individual coordination. This automated process is designed to streamline the administrative process for non-Federal users in the bands. The Commission noted that the classified nature of some Federal operations precludes the use of a public database containing both Federal and non-Federal links.

47. This system has been effectively used for over a decade to facilitate coexistence between commercial systems and Federal systems: the technical data needed to avoid interfering with incumbent non-Federal licensees is already available in existing registration databases, and an automated system to prevent interference with Federal systems is already in place and has been in operation for years.

48. Recently, the Commission has developed other means of facilitating spectrum sharing. In May 2016, seven parties filed applications to be certified SAS Administrators for the Citizens Broadband Radio Service. The SAS is a critical tool to enable spectrum sharing in the band. SAS will protect incumbent users based on technical criteria, authorize all devices in the band, protect a Priority Access Tier, and coordinate a General Authorized Access (GAA) Tier. By leveraging the SAS computational power, protections can be tailored to the characteristics of the systems that require protection, different uses with different characteristics can be coordinated in a similar area, and spectrum efficiency can be maximized. Based on the experience with the coordination system for the 70/80 GHz band, and the existing rules for the SAS, the Commission proposes to establish a SAS-based regulatory framework adapted to the constraints and the opportunities of the 71–76 and 81–86 GHz bands. In particular, the Commission invites comments on the following questions and proposals:

- The Commission proposes to establish three tiers of users for the 71–76 and 81–86 GHz band, consisting of: (1) Incumbent Access users, which would receive the highest level of protection; (2) Priority Access Licensees (PALs); and (3) GAA users. Each tier would be required to prevent interference to, and accept interference from, higher tier users.
- The Commission seeks comment on whether the rules for these bands should be included in Part 30 (Upper Microwave Flexible Use Service) or Part 96 (Citizens Broadband Radio Service).
- Incumbent Access: The Commission proposes to continue to protect existing Federal locations and seek comment on the ability to add future sites on the same protected basis. The Commission seeks comment on whether existing 70/80 GHz licensees and registered links should also qualify for incumbent protection. Alternatively, the Commission seeks comment on whether they should be grandfathered for some period of time, then required to transition to the new service the Commission proposes here (most notably, deploy equipment consistent with the technical rules and capable of communicating to an SAS). To the extent grandfathered links are protected, the Commission proposes to require the links to be operational and in service, and seek comment on requiring incumbent licensees to certify their construction and operational status with the Commission. The Commission also seeks comment on the appropriate means for protecting Federal incumbents, including whether the Commission should modify the existing system or utilize a more automated system (like a sensor-based system). Finally, the Commission seeks comment on the extent to which Federal users could expand their service area and gain protected status under the incumbent tier.
- *Priority Access:* As in the Citizens Broadband Radio Service, the Commission proposes to create a Priority Access Tier in which the Commission would make PALs available for geographic license areas. The Commission proposes to authorize PALs within census tracts, with one-year, non-renewable license terms. The Commission believes that this approach will provide licensees with the certainty required to promote investment while maximizing efficient use of the spectrum and incentivizing a variety of innovative deployment models. The Commission seeks comment on this proposal.
- *General Authorized Access:* The Commission proposes to create a GAA tier, and seek comment on whether the tier should be licensed by rule or subject to a "licensed light" regime similar to the existing structure for the 70/80 GHz band (non-exclusive nationwide licenses with individual sites authorized). The Commission seeks comment on whether the GAA tier should have access to a set channels, (*i.e.,* there would be some first-in-time right that would provide some level of certainty) or if the Commission should require (or allow) the SAS to dynamically maximize the number of GAA sites in a given area. Finally, the Commission seeks comment on whether the Commission should defer authorizing GAA users until the conclusion of initial Priority Access license terms.
- *Protection Methodology:* The Commission invites comment on the appropriate technical methodologies for protecting licensees that are entitled to protection, including but not limited to the following alternatives:

a. Require SAS to calculate expected aggregate interference at each incumbent or Priority Access receiver, based on their positions and the technical parameters of their equipment, together with the corresponding parameters of intruding transmitters.

b. Establish a maximum aggregate received signal level within Priority Access license areas, which would be measured in terms of power flux density (PFD) per megahertz of bandwidth at specified heights above the ground.

c. Implement an alternate protection scheme whereby the SAS would protect operator-defined contours around Priority Access base stations to a protection level at a specified dBm per megahertz of bandwidth anywhere within the contour.

- *Technical Rules:* The Commission proposes to establish two classes of licenses for point-to-point operations in these bands that will be subject to the technical requirements described below.

a. Class A licenses would be authorized only for operations at a minimum specified height above ground level, would be authorized to use comparatively high power levels, and would be required to use tight-beamwidth antennas. Class B point-to-point licenses would be authorized transmit at streetlamp level, with somewhat relaxed beamwidth requirements in order to accommodate smaller antennas. The Commission invites comment on the appropriate height limits, power levels, and beamwidth constraints that would be appropriate for these purposes.

b. The Commission proposes to authorize dynamic beamforming antennas to provide in-band backhaul so long as they conform to the same beamwidth requirements, height limitations, and other requirements that apply to conventional antennas used for point-to-point links.

c. The Commission proposes to authorize the same dynamic beamforming antennas to serve mobile user equipment, with further relaxation of beamwidth requirements, provided that they are situated no higher than streetlamp level and provided further that their antennas are inclined downward at a minimum specified angle when they are communicating with mobile user equipment. The Commission invites comment on appropriate beamwidths, inclination angles, power levels, and height constraints for these purposes.

d. The Commission proposes to require that Class A license equipment be professionally installed but that non-professionals be allowed to install Class B license equipment and mobile base station equipment, provided that the installer is equipped with the necessary geo-location equipment or that the equipment itself is capable of ascertaining its location and its orientation.

e. The Commission invites comment on technical requirements that would be appropriate for different kinds of user equipment in these bands, differentiating between point-to-point, handheld mobile equipment, and mobile equipment that will typically be situated more than 20 centimeters away from people. The Commission proposes to require that user equipment be allowed to transmit only when it is locked onto a serving base station, with the possible exception of brief pilot or sounding signals.

f. The Commission proposes to require SAS to maintain and verify information from registered base stations and Fixed Service transmitters and receiver equipment under their coordination, and the Commission invites comment on the minimum geographic positioning accuracy that the Commission should require, including accuracy with respect to altitude as well as latitude and longitude. The Commission also seeks comment on requiring licenses to update registration information if the location or operational status of registered base station equipment changes. The Commission does not propose to require SAS to maintain position awareness of mobile user equipment.

g. The Commission proposes to establish out of band emissions (OOBE) limits for all equipment authorized to operate in these bands, and the Commission invites comments on the appropriate technical parameters to apply for that purpose.

- *Indoor Use:* The Commission invites comments on the feasibility of authorizing unlicensed, indoor-only operations, subject to Part 15 of our rules. The Commission has decided not to adopt the *NPRM's* proposal to authorize unlicensed indoor-only operations in the 37 GHz band, but the Commission believes that the comparative amount of signal leakage through windows could be much lower in the 71–76 GHz and 81–86 GHz bands, and consequently would be less likely to interfere with outdoor operations. The Commission seeks further information on that issue, especially from commenters that have performed relevant tests or have access to the results of such tests. The Commission notes that Part 15 already provides technical rules for indoor-only operation in the 92–95 GHz band that are similar to the rules in the existing 57–64 GHz band, but require that these devices be AC-powered in order to ensure that they only operate indoors. If the Commission allows unlicensed operation at 71–76 GHz/81–86 GHz, should similar technical rules apply? What additional restrictions should be added to ensure that this type of equipment will not interfere with authorized services that are currently operating in these bands? Alternatively, would registered indoor GAA use be a better mechanism for facilitating indoor use of these bands? The Commission seeks comment on this and any other relevant issue regarding unlicensed and indoor operations within this spectrum.
- The Commission proposes to extend the same requirements and privileges to all parts of the United States, but the Commission also invites comment on the alternative of establishing a separate regulatory framework for the 16 counties that are heavily registered with incumbent users.
- The Commission proposes to require SAS to be capable of performing the following operations:

a. Determine the available frequencies at a given geographic location and assign them to PAL and/or GAA licensees;

b. Determine the maximum permissible transmission power level for incumbent, PAL, and GAA licensees at a given location and communicate that information;

c. Register and authenticate the identification information and location of incumbent, PAL and GAA licensees;

d. Enforce Exclusion and Protection Zones, including any future changes to such Zones, to ensure compatibility between non-Federal users of spectrum in the 71–76 GHz and 81–86 GHz bands and incumbent Federal operations;

e. Ensure that PAL and GAA licensees protect non-Federal incumbent users consistent with the rules;

f. Protect Priority Access Licensees from impermissible interference from other users;

g. Facilitate coordination between GAA users to promote a stable spectral environment;

h. Ensure secure and reliable transmission of information between the SAS, ESC, and PAL and GAA licensees;

i. Provide any ESC that the Commission might approve with any sensing information reported by PAL and GAA licensees if available;

j. Facilitate coordination and information exchange with other SASs and exchange information, as needed, with NTIA.

49. The Commission also seeks comment on alternative methods of authorizing additional access to these bands, including exclusive use licensing and unlicensed. As discussed, authorizing new flexible use operations in these bands is difficult given the incumbent fixed commercial and Federal operations. How would an exclusive use licensing or unlicensed access models work? How would incumbents be protected and be permitted to expand? Could the Commission auction overlay licenses that allow the auction winner to negotiate with the incumbents in the area for their rights? How could unlicensed operations sufficiently protect incumbents? Have circumstances changed since the Commission declined to allow unlicensed operations in these bands in 2003? The Commission seeks comment on these and other issues implicated in any alternative licensing or authorization scheme.

8. Bands Above 95 GHz

50. In the *NPRM,* the Commission noted that several parties expressed support for making additional spectrum available in the upper reaches of the spectrum, particularly above 95 GHz. The Commission invited parties to submit proposals for use of this spectrum, including proposals for authorizing use under our Part 15 rules for unlicensed devices. Commenters

generally did not respond to this request, but the Commission recognizes that the *NPRM* explored many spectrum issues and commenters may have chosen to focus on the specific proposals for the frequency bands below 95 GHz. Moreover, the Commission is aware that operations above 95 GHz involve nascent technology that is being developed by small companies that may not be accustomed to participating in FCC proceedings. Nevertheless, the Commission is committed to developing a record that will provide a basis for proposing rules that will encourage the introduction of new services and devices above 95 GHz.

75. The spectrum from 95 to 275 GHz has been allocated for a variety of different types of Federal and non-Federal radio services. In addition, the international Table of Frequency Allocations has been extended from 275 to 1,000 GHz for specific services and, in a separate proceeding, the Commission is considering how to amend the United States table. The bands above 95 GHz have already been identified for services that typically involve the reception of extremely weak signals, such as radio astronomy, space research, and Earth Exploration Satellite. All of the bands, with some minor exceptions, are allocated on a co-primary basis for Federal and non-Federal use.

51. The Commission recognizes that signals in the frequency bands above 95 GHz will attenuate rapidly, intuitively tending to minimize the risk of harmful interference to other radio services. However, this does not by itself provide a basis for proposing to allow use of any spectrum above 95 GHz. The Commission believes the process of facilitating technology above 95 GHz can best be advanced by identifying specific frequency bands rather than attempting to address all parts of the spectrum above 95 GHz. Accordingly, the Commission takes this opportunity to solicit information on the specific parts of the spectrum that would be most attractive from the standpoint of technology development while successfully coexisting with the types of radio communications services that operate under the existing allocations.

52. In identifying specific frequency bands, the Commission asks commenters to provide specific analyses to justify any claims that there are no risks of harmful interference to other radio services. Which bands should be made available for licensed or unlicensed use? Is there sufficient information to identify where and on what frequencies both existing and planned radio astronomy, space research, Earth Exploration Satellite, and similar users will actually operate? What technical rules may be appropriate? For parties supporting unlicensed use, will it be necessary to control the locations of operation to prevent harmful interference to radio astronomy, space research, Earth Exploration Satellite, or other services? If so, how could the areas of permissible operations be controlled under the unlicensed rules? For bands that commenters believe should be made available on a licensed basis, should the new Part 30 rules or other service rules apply? How would the Commission create a licensing scheme for signals that generally propagate over very short distances? Should the Commission permit both mobile and fixed service? What technical rules should apply? The Commission encourages parties to file comments addressing these matters.

B. Federal Sharing Issues—37 GHz Band (37–38.6 GHz)

53. As the Commission indicated in the *Report and Order,* FCC staff will—in coordination with NTIA, Department of Defense (DoD), and other Federal and non-Federal stakeholders—further define the sharing framework by more fully developing the coordination mechanisms the Commission adopt for the lower band segment. The Commission also seeks comment on adopting methods for shared (Federal and non-Federal) access of the upper band segment, including through a use or share requirement, and how to facilitate coordination for potential future Federal access across the licensed portions. Thus the Commission seeks comment on the issues described below.

1. Coordination Mechanism for the Lower Band Segment

54. As explained in the *Report and Order,* the lower band segment is available for coordinated coequal sharing between Federal fixed and mobile users and non-Federal fixed and mobile users. Non-Federal fixed and mobile users, which the Commission will identify as Shared Access Licensees (SALs), will be authorized by rule. Federal and non-Federal fixed and mobile users will access the band by registering individual sites through a coordination mechanism. The *Report and Order* explained that FCC staff will work with stakeholders, both Federal and non-Federal, to help develop the details of the coordination process. Here, the Commission seeks comment on the coordination mechanism—that is, the regulatory, technical, or procedural tool necessary to actually facilitate coordinated access. Our expectation is that some of the issues raised here may be further developed through the collaborative process between the FCC, NTIA, DOD, and other Federal users set out in the *Report and Order,* as well as through comments in response to this *FNPRM.*

55. The Commission believes that a robust coordination mechanism is essential to ensuring that both Federal and non-Federal fixed and mobile users have effective coordinated access to the lower band segment. The coordination mechanism will authorize a particular user to use a particular bandwidth of spectrum at a particular location. To do so efficiently and effectively, it must be able to obtain information about the type of equipment used, the signal contour from the coordinated location, and the bandwidth requested compared with the bandwidth available. As discussed below, it must also be capable of regularly updating the status of a coordinated location (on/off or authorized/unauthorized). Moreover, it will have to incorporate this type of information for both Federal and non-Federal fixed and mobile uses. Here, the sharing environment is relatively straight forward—there are limited incumbent uses that need to be protected, and Federal and non-Federal fixed and mobile users will have coequal rights to the band. The Commission also believes that the propagation characteristics of this band might help minimize the complexity of the coordination mechanism.

56. The Commission notes that historically the Commission has used manual frequency coordination managed by third party frequency coordinators. Recently however, the Commission finalized the rules for the 3.5 GHz Citizens Broadband Radio Service, which relies not on a static frequency coordination mechanism, but on a dynamic mechanism known as a SAS that coordinates uses among different tiers of users, rather than on an individual basis. The Commission seeks comment on the most appropriate mechanism for the lower band segment. Should the Commission rely on static, manual frequency coordination, a dynamic SAS-type mechanism, or something in between? For instance, would the advanced capabilities of automated coordination from SAS present advantages over other types of coordination? Is a full SAS implementation, consistent with the Part 96 requirements, appropriate here?

57. The Commission also seeks comment on the protection or operation contours necessary for the coordination mechanism to reserve a quantity of spectrum at a location for a user. In the

Report and Order, the Commission established technical rules for operation in the lower band segment, which are consistent with the rules adopted for the 28 GHz band, the 39 GHz band, and the upper band segment of the 37 GHz band. Based on this technical information, should the Commission establish a maximum protection contour for coordinated sites? Alternatively, should the Commission allow the coordinated party to request less or more protection?

58. Although non-Federal fixed and mobile users must follow the coordination requirements that the Commission adopted in the *Report and Order* to protect the Federal sites listed in Section 30.205 of our rules, the Commission seeks comment on how to ensure coexistence between Federal and non-Federal fixed and mobile users. Ideally, Federal fixed and mobile uses would comply with the same or similar technical requirements as non-Federal fixed and mobile uses. For instance, NTIA might establish in its Manual of Regulations and Procedures for Federal Radio Frequency Management a set of technical rules for operations in this band, there could be a notation in the U.S. Table of Frequency Allocations, or the Commission could rely on some other means. The Commission seeks comment on these and other mechanisms. Absent consistent (or known) technical rules governing Federal operations, how should the coordination mechanism account for their protection or operational area of these operations?

59. Finally, the Commission seeks comment on how best to coordinate Federal access. Is it feasible for Federal users to rely on the same coordination mechanism as non-Federal? How should the coordination mechanism address information security issues particular to Federal users? The Commission seeks comment on the means of achieving information security, including ways for the information to be masked, *e.g.,* by having Federal users coordinate through a Federal intermediary that interfaces with the non-Federal coordination mechanism, such as the existing mechanism in the 70/80/90 GHz band.

2. Channelization of the Lower Band Segment

60. As discussed in the *Report and Order,* the lower band segment consists of 600 MHz of spectrum from 37–37.6 GHz. Although the Commission adopted a channelization plan for the upper band segment, the Commission did not do so for the lower band segment. Thus, the Commission proposes to guarantee users in the lower band segment a minimum channel size. Specifically, the Commission proposes to establish a 100 MHz minimum channel size. The Commission also proposes, however, to allow users to aggregate 100 MHz channels into larger channel sizes, up to the maximum of 600 MHz where available (subject to use requirements as described below).

61. The Commission also finds that our proposal to adopt a minimum channel size of 100 MHz strikes the right balance between providing enough spectrum for a diversity of wireless uses with helping to minimize the complexity of the coordination mechanism. The Commission notes that while most commenters in this proceeding generally favor channel sizes of 200 MHz or greater, other commenters suggest that smaller channel sizes can still facilitate robust wireless broadband services. By permitting users to aggregate up to 600 MHz channels, the Commission found that it has enabled maximum flexibility for a variety of use cases involving a variety of channel sizes. The Commission seeks comment on these proposals. The Commission also seeks comment on alternative approaches, including whether the Commission should adopt 100 MHz or a larger minimum channel size. In addition, the Commission seeks comment on whether the Commission should refrain from setting a minimum channel size and instead require the coordination mechanism to attempt to maximize the number of users in a given area.

3. Authorization Expiration/Construction Requirement for the Lower Band Segment

62. To achieve a robust and efficient sharing environment and prevent spectrum warehousing, the Commission proposes that registered non-Federal sites must be put into service within seven days of coordination and that registered and coordinated sites must reassert their registration every seven days. For example, if the Commission relies on a database for coordination, a user could query the database for available frequencies at a location, and reserve those frequencies for seven days. Within seven days, it would need to activate a device that is capable of notifying the database that it is active on the channel. That device would then check in with the database (or receive and respond to a message from the database) at least once every seven days. If the device fails to check in within the seven day period, its authorization would lapse. The Commission seeks comment on this proposal. Are these time frames appropriate? Are there other tools to ensure the spectrum is put to use consistent with the public interest?

4. Priority Access for Federal Users of the Lower Band Segment

63. The Commission recognizes that Federal users' needs are not necessarily commensurate with non-Federal users' needs. The use cases will likely differ, the level of certainty and protection or a use related to a critical defense or national security mission may vary. The Commission therefore seeks comment on whether the Commission should make a portion of the lower band segment available for priority access by Federal users. For instance, should the Commission allow Federal users to claim priority access to up to 200 MHz of the 600 MHz lower band segment? Could the coordination mechanism statically reserve this space or dynamically make it available when requested? For instance, if the entire band is in use, could the database reconfigure the channels or clear the necessary channel size?

5. Interference Mitigation in the Lower Band Segment

64. The Commission seeks comment on any necessary enforcement mechanism in the lower band segment to help identify and rectify interference events. Because the Commission proposes to require users in the lower band segment to coordinate on a site-basis, it may be easier to identify and rectify any interference issues that may arise. The Commission recognizes, however, that there may be users and uses, both Federal and non-Federal, for which any interference may be significantly problematic. Therefore, the Commission seeks comment on any additional interference mitigation and enforcement mechanisms that might be necessary.

6. Secondary Market Policies for the Lower Band Segment

65. Finally, the Commission seeks comment on whether and how to apply secondary market rules to the lower band segment. As proposed, the band will be made available on a site-by-site basis. Partitioning and disaggregation generally do not apply in site-based licensing circumstances. Should they apply here, and if so, how? Should the Commission apply our leasing rules? What are the benefits to secondary market rules for the lower band segment relative to other ways to gain access to the spectrum?

7. Use It or Share It and Federal Sharing in the Upper Band Segment

66. As described in the *Report and Order,* the upper band segment, 37.6–38.6 GHz, is divided into five channels each 200 megahertz wide. The upper band segment will be available on a geographic basis (with protected Federal sites) via auction. The technical and service rules the Commission adopted allow continuity between the upper band segment and the 39 GHz band, which provides 2400 MHz of contiguous spectrum under the same licensing and technical rules. Given the types of uses that may be deployed in the 37 GHz band and the flexible build out requirements that the Commission adopted in the *Report and Order,* there may be significant unused spectrum in in the upper band segment at any given time. To improve the spectrum efficiency and provide an opportunity for Shared Access Licensees and Federal users to expand in a manner that does not impact geographically licensed uses, the Commission proposes to permit shared access of the unused portions of the five channels in the upper band segment, under certain conditions. The Commission also seeks comment on establishing a process by which Federal users could coordinate with licensees for future expanded access in the upper band segment.

67. The Commission notes that it has found spectrum sharing to be an effective tool to maximize spectrum efficiency. In the 700 MHz band, the Commission adopted a performance requirement that results in the licensee losing its unconstructed license area. In the Citizens Broadband Radio Service, Priority Access License areas that are not in use must be made available for General Authorized Access use. Moreover, in the *Report and Order,* to meet the applicable performance requirements, licensees in the 28 GHz and 39 GHz band may choose to share access to their licensed spectrum. Furthermore, the Commission believes that the prospect of future shared access (on a coordinated and non-interference basis) to the remainder of the band may create incentives for investment and innovation in the shared channel.

68. The Commission understands that upper band segment licensees may make reasonable business decisions to not serve particular parts of a licensed area, and that these decisions may change over time. In an environment where these unserved areas are shared, it is important to be able to both accurately identify the areas in use and enable the geographic area licensees to expand or contract their coverage as necessary. Under our proposal, the upper band segment licensee would retain the primary right to construct and provide service anywhere within its license area at any time, and any operations undertaken on a shared basis would be subject to displacement by the primary licensee. The Commission therefore proposes to require licensees to provide information about the extent of their operations at some future point in order to enable shared access.

69. The Commission also seeks comment on when the Commission should phase in shared access. Would it be appropriate to phase in shared access at the end of the initial license term, or would it be appropriate to adopt a sharing requirement at an earlier time (*e.g.,* 5 years from the date the upper band segment geographic area license is granted). The Commission seeks comment on the scope of the information that the incumbent licensee must provide to the coordinating mechanism. Would a map with simple protection contours be sufficient, or would additional information be necessary? The Commission also seeks comment on the appropriate mechanism for dealing with multiple requests to share the same spectrum in the same location. Should the Commission adopt a first-come, first-served approach, require multiple parties to share unused spectrum amongst themselves, or adopt some other mechanism? In the *Report and Order,* the Commission established coordination zones around three Space Research Service (SRS) sites and 14 military sites that apply across the entire 37 GHz band, including the upper band segment. As the Commission envision non-Federal users being able to coordinate for access on within the 14 military sites, the Commission seeks comment on additional circumstances and methods under which the upper band segment can be made for expanded future Federal use, in addition to the shared access scheme. For example, should the Commission establish a required coordination process under which Federal users could formally request coordinated access from a licensee? If the Commission establishes such a process, how does the Commission properly balance the respective rights and interests of Federal users and non-Federal licensees? How would the Commission ensure co-existence between deployed commercial systems (or planned systems) and the Federal system that is seeking coordinated access? Should the Commission impose an obligation on UMFUS licensees to consider in good faith such coordination requests from Federal users? What standards should the Commission establish for consideration of such coordination requests? Are there alternative ways of ensuring that Federal users can take advantage of their co-primary fixed and mobile allocations while protecting the rights of non-Federal licensees? Are there lessons and recommendations that the Commission can incorporate form the ongoing work within the Commerce Spectrum Management Advisory Committee? The Commission seeks comment on all issues relating to Federal access to the upper band segment.

C. Performance Requirements

1. Additional Metrics

70. In the *Report and Order,* the Commission adopted a list of performance metrics for measuring sufficient use of a license to qualify for renewal. The Commission acknowledged that this list is not exhaustive, and in particular, does not contain metrics designed to accommodate new and innovative services that may develop in the millimeter wave bands. The Commission therefore seeks comment on additional performance metrics that will better accommodate these new services while fulfilling our statutory obligation to encourage productive use of spectrum and avoid warehousing and speculation.

71. In particular, the Commission seeks comment on an appropriate metric to evaluate the deployment and performance of an Internet of Things (IoT) type service, which is designed primarily to facilitate machine-to-machine communication. Such services may or may not be deployed in areas of substantial residential population, and may or may not be designed to serve unaffiliated customers. Examples of this type of service would include the Supervisory Control and Data Acquisition (SCADA) systems described by Southern Co. Because of the unique characteristics of these machine-to-machine services, the Commission proposes to develop a distinct metric by which to measure the deployment of such services, rather than attempting to modify a population coverage approach for this purpose. The Commission seeks comment on this proposal, including specific suggestions for what aspects of such services should be measured, how they should be measured, and what specific levels would constitute an acceptable level of service.

72. In the *Order,* several commenters suggested that the Commission measure performance for all services in the

millimeter wave bands on the basis of actual use of the service, including number of devices connected, volume of data transmitted, or number of sessions initiated on the network. The Commission seeks further comment on these metrics, including specific numbers for the levels of devices, sessions, and data volume that commenters believe would be appropriate milestones. Would one of these metrics be the most appropriate way to measure deployment of an Internet of Things or machine-to-machine type service? The Commission also seeks comment on whether and how it would be practical to implement this type of usage-based requirement. How could the Commission verify information provided by licensees? Should all kinds of devices, sessions, and/or data be counted equally? How should such a requirement be structured to ensure that it both measures and encourages meaningful service, rather than gamesmanship?

73. As some commenters note in this proceeding, licensees in these bands may seek to provide service to areas with high daytime or transient populations but low or no residential populations, such as corporate campuses, interstate highways, or event venues. The Commission seeks comment on how to define such locations for the purposes of evaluating service coverage. The Commission also seeks comment on the appropriate framework for incorporating coverage of such locations into an overall performance metric. Would a venue per population metric be appropriate, similar to the current treatment for fixed links? Should the applicable milestone be based on the daytime or transient population served by such venues or traffic corridors? How should such population be measured?

74. The Commission also seeks comment on any other types of service being contemplated by potential providers, as well as metrics that would be appropriate to measure performance or build-out of those services.

75. Finally, in the *Report and Order* the Commission explained that licensees may demonstrate combinations of fixed and mobile deployments in order to meet their performance requirement, and that the Commission intended to review the showings on a case-by-case basis. Here, the Commission seeks comment on whether to establish clear benchmarks or even guidance for the amount of buildout that might be adequate in these combined showings. For instance, should the Commission establish a scale with levels showing acceptable combinations of mobile and fixed deployment, where either mobile or fixed is increased relative to the other? Or should the Commission establish variations depending on the population density of a given license area, the land mass of the area, or some other factor? The Commission seeks comment on any other means to provide flexibility and clarity in how the Commission may measure combined showings, or whether the Commission should continue to review the showings on a case-by-case basis as contemplated in the *Report and Order.*

2. Sharing Mechanisms

76. Given the relatively limited record on the substantive issues regarding mechanisms for sharing unused portions of UMFUS licenses, the Commission seeks further comment on the possibility of implementing a use-or-share regime in the UMFUS bands. The Commission continues to believe that a use-or-share regime may have the potential to enhance the efficiency and productivity of spectrum, if properly implemented. In particular, given the propagation characteristics, and high potential for re-use, of the mmW spectrum, the Commission seeks comment on whether such a regime could maximize the efficient use of these spectrum bands. The Commission further seeks comment on the costs and benefits of adopting mechanisms for sharing unused UMFUS spectrum, as well as on the incentives that particular sharing regimes will create. In addition, the Commission seeks comment on the appropriateness of requiring UMFUS licensees to share unused portions of their license in addition to, or in lieu of, meeting specific construction requirements, particularly in geographically licensed bands such as 28 GHz and 39 GHz.

77. In crafting an effective mechanism to share unused spectrum, there are two governing considerations: first, ensuring the licensee has exclusive use of the areas in which it is using the spectrum; and second, creating an efficient mechanism that both makes unused spectrum available and protects the licensee from interference. There are a variety of potential options for enhanced sharing mechanisms that address these considerations. The Commission seeks comment generally on the following opportunistic sharing mechanisms: a fully dynamic sharing solution, facilitated by a SAS or other third-party database; a modified shared access system that would be less dynamic but simpler; an unlicensed shared access approach, similar to white spaces, and other alternatives.

78. The Commission seeks comment on variations of a use it or share it mechanism. A potential drawback of a keep what you use mechanism is that the Commission must reclaim, and later re-auction, the unused portions of the band, which takes time and minimizes a licensee's ability to decide later to deploy in an area (which is also a feature of the approach because it incentivizes maximum initial deployment). Use or share mechanisms permit a licensee to retain control of its license area, but require the licensee to share with other entrants in portions of the license area in which it is not operating. A use or share mechanism may be less administratively burdensome than keep what you use, and may also allow a greater number of users to access the shared spectrum. There are a number of possible variations of use or share, all of which share characteristics of basic frequency coordination.

79. One option would be to automate shared access to enable dynamic opportunistic sharing. In a dynamic sharing solution, licensees would have some initial period of time to build out their networks. After this period, information about the extent of licensees' deployment would be made available, and other entities would be free to deploy outside of the area used by the licensee's operations on a coordinated basis, subject to further expansion by the licensee. The Commission seeks comment on whether an automated dynamic use or share mechanism would be appropriate in the mmW bands. Generally, these shared users would need to operate similar technologies subject to the same technical rules as the licensee to maximize spectrum efficiency and economies of scale with respect to equipment. The Commission seeks comment on whether the propagation characteristics of these bands might facilitate shared access with slightly different technical rules. With respect to the sharing mechanism, what types of information, and what level of detail, would be required to facilitate dynamic sharing? Should opportunistic users be authorized on a license-by-rule basis, or by some other method? Should opportunistic users be afforded some level of interference protection from each other, and if so what should that level be?

80. Another option is to rely on more traditional frequency coordination, typically used in point-to-point microwave, shared millimeter wave bands, and other services today. Under a simple frequency coordination process, the licensee's operations would

be protected around a contour, and new sites would be individually coordinated into the license area. While a database could further automate this process, it may not be necessary given the relatively simple sharing regime. The Commission seeks comment on whether a sharing mechanism based on traditional frequency coordination would be appropriate for the mmW bands.

81. Yet another option is to established pre-defined geographic areas that will be available for shared access, depending on a licensee's construction. For instance, if a licensee meets its performance requirement, the Commission could find that any county (or other unit of geographic area) in which it has any operation is unavailable for sharing. For example, a licensee of a PEA might deploy heavily in some counties but not others; the heavily-deployed counties would then be deemed "in use," while the counties with no deployment would be available for opportunistic use in undeployed areas. The Commission seeks comment on the appropriateness of this mechanism as a whole, and on the specific details. What level of subdivision would best accommodate both licensee certainty and sharing opportunity? Should the Commission stop at the county level, or should the Commission further subdivide into census tracts or census blocks? What level of deployment in each subdivision should qualify that area for "used" status? How should the Commission enable sharing—through a database, individual coordination, or some other method?

82. Finally, the Commission also seeks comment on implementing unlicensed shared access, similar to TV white spaces, in the unused portions of the UMFUS bands. In this case, opportunistic users would operate on an unlicensed basis at lower power in any area where the licensee was not actually deployed. The Commission seeks comment on whether and how to implement such a system in the millimeter wave bands. Would this system require a third-party database, similar to the dynamic sharing solution? How should the Commission draw the contours around licensee deployments? Should the Commission use a fixed radius, or an interference contour at a certain level, or some other metric? Would this method be preferable to a dynamic sharing solution where the opportunistic users and the licensee followed the same technical rules? Are there technical benefits to this approach? Will there be sufficient scale to drive more special-purpose equipment development?

83. To the extent that the Commission implements any variation of a use it or share it mechanism in the mmW bands, certain key aspects of that mechanism must be defined. Most importantly, the Commission seeks comment on how to define a licensee's "use" of its licensed spectrum. Should "use" be defined geographically, either by the service area of a network or by a defined radius or contour around deployed equipment? In the Citizens Broadband Radio Service, the Commission recently adopted an engineering metric to determine the extent to which Priority Access Licenses are in use. Licensees can define the area of use subject to an objective maximum. Should the Commission follow this model? Should "use" be defined differently for different types of deployments, for example mobile vs. fixed links? Additionally, the Commission seeks comment on how best to allow the licensee room to expand beyond its area of actual deployment (or its "used" spectrum, however ultimately defined). For example, should the Commission define a contour for an additional protected area? If so, on what basis and how often should the Commission do so? Should the Commission set some level at which a subdivision of a license area would be declared "used" in its entirety, and off-limits to opportunistic use? If so, what subdivisions and what level of deployment would be appropriate (*e.g.*, 40% of the geographic area of a census tract)? Finally, the Commission seeks comment on the appropriate level of protection for licensees at the boundaries between "used" and "unused" areas. Should the level of cross-border interference protection be the same as that between two licensees, or would some other limit, either higher or lower, be more appropriate?

84. In addition to the inquiries above, the Commission seeks comment on any other mechanisms of opportunistic sharing that could enhance spectrum efficiency in the UMFUS bands, as well as any other aspects of such a system that would be required to ensure it could be reliably and effectively implemented. The Commission especially seeks comment from any entity interested in using spectrum on an opportunistic basis in these bands. What technologies or business cases would lend themselves to this type of spectrum access? Which sharing mechanism, described above or otherwise, would best accommodate that use?

D. Mobile Spectrum Holdings Policies

85. In the *Order*, the Commission adopted an ex ante spectrum aggregation limit of 1250 megahertz that will apply to licensees acquiring spectrum in the 28 GHz, 37 GHz, and 39 GHz bands through competitive bidding.[4] By helping to ensure that multiple providers have access to the spectrum the Commission made available in the *Report and Order*, the spectrum aggregation policies the Commission adopted support our overarching goals of facilitating competition, innovation, and the efficient use of the spectrum. The Commission seeks comment below on additional mobile spectrum holdings issues related to how to implement the spectrum aggregation limit; the appropriate holding period; and whether a spectrum aggregation limit would be appropriate as additional "frontier" spectrum bands become available.

1. Implementation of a Spectrum Aggregation Limit at Auction

86. Of the 986 designated license areas in the 28 GHz band, 412 areas have active licenses, which cover about 75 percent of the U.S. population, while the 37 GHz band is not yet licensed, and in the 39 GHz band, current licensed areas cover about 49 percent of the U.S. population. Further, in terms of geographic licensed areas, the 28 GHz band will be licensed on a county basis across the U.S., while the 37 GHz and 39 GHz bands will be licensed by PEA.

87. For purposes of assessing eligibility to bid across the three spectrum bands any given entity cannot hold more than 1250 MHz of this spectrum in total. Taking into account existing incumbents' holdings in the 28 GHz band and the 39 GHz band, as well as different geographical license areas, the Commission put forward and seeks comment on two alternative methodologies for assessing bidding eligibility. The Commission asks for comment on which methodology is more appropriate, and why. The Commission also asks that interested parties comment on the likely costs and benefits associated with each methodology. Are there additional methodologies beyond the two alternatives set out below that would be more appropriate to adopt? If so, the

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[4] The Commission adopted a spectrum threshold of 1250 MHz in the *Order* for proposed secondary market transactions, and noted that while this 1250 MHz threshold would help identify those markets that provide particular reason for further competitive analysis, the Commission's consideration of potential competitive harms would not be limited solely to those markets.

Commission invites interested parties to present their alternatives. Which methodological approach should the Commission use and how best would the Commission implement it?

88. The first methodology that the Commission invites comment on is the "maximum county-to-PEA" option. Under this option, if any incumbent licensee in the 28 GHz band, for example, holds such spectrum, its spectrum holdings at the county level would be counted at the PEA level when determining eligibility to bid on 37 GHz and 39 GHz spectrum. For instance, if an incumbent licensee currently holds two licenses, or 850 MHz of spectrum, in the 28 GHz band in any county within a PEA, then that licensee's 28 GHz spectrum holdings would be counted as 850 MHz for the PEA as a whole. In addition, that same licensee's 39 GHz holdings, if any, would be added on to its 28 GHz holdings of 850 MHz. That licensee would then be able to acquire a maximum of an additional 400 MHz of spectrum across the 37 GHz and 39 GHz bands if it so chose (this maximum of 400 MHz assumes it has no current holdings in the 39 GHz band). Similar calculations would apply in the 39 GHz band. For instance, for those licensees that currently hold more than 400 MHz of spectrum in the 39 GHz band in any county in a given PEA, such entities would be unable to bid on both licenses in the 28 GHz band but potentially could still bid for one license in the 28 GHz band, as well as on 37 GHz spectrum and additional 39 GHz spectrum. To determine bidding eligibility across the three bands for those entities who do not currently hold licenses in the 28 GHz or 39 GHz band, the Commission would similarly count maximum spectrum holdings in counties at the PEA level. The "maximum county-to-PEA" option is a simple way to calculate spectrum holdings in which the licensing areas of each band have varied geographies, and the Commission seeks comment on this first methodology for determining eligibility to bid.

89. The second methodology that the Commission invites comment on is the "population-weighted-average" option. This option involves calculating an entity's current spectrum holdings on a county-by-county basis within a PEA in the 28 GHz and 39 GHz bands, and then constructing a population the weighted average for that PEA as a whole. For incumbent licensees in the 28 GHz and 39 GHz bands, the Commission would sum the product of county spectrum holdings and county population within the PEA (using U.S. Census 2010 population data), and then divide that sum by the total population of the PEA. This would provide us with the population-weighted amount of 28 GHz and 39 GHz spectrum held by that incumbent in that PEA. The entity would then be able to bid on 28 GHz spectrum (by county, and any winning bid would be weighted by the county population divided by the PEA population), and 37 GHz and 39 GHz spectrum (by PEA or partial PEA), up to the population-weighted limit of 1250 MHz. To determine eligibility to bid for those entities who do not currently hold licenses in the 28 GHz or 39 GHz bands, the Commission would also calculate prospective holdings based on a population-weighted average within the PEA. Overall, any entity would not be able to bid on certain spectrum if, across the three bands, it would hold 1250 megahertz or more on a population-weighted basis. The Commission seeks comment on this second methodology for determining eligibility to bid.

2. Holding Period

90. In addition to the decisions made in the *Report and Order,* the Commission seeks comment on our proposal to adopt a holding period that would preclude certain proposed secondary market transactions for licensees that acquire certain amounts of 28 GHz, 37 GHz, and/or 39 GHz spectrum at auction. In the *Mobile Spectrum Holdings Report and Order* (*see Policies Regarding Mobile Spectrum Holdings;* WT Docket No. 12–269, Report and Order, 29 FCC Rcd 6133 (2014)), the Commission established a six-year holding period, which represented the interim buildout period for 600 MHz licensees, restricting certain proposed secondary market transactions for 600 MHz band licensees. The Commission determined that establishing a holding period best balanced its goals of preserving the integrity of the market-based spectrum reserve it had established while still permitting some flexibility in secondary market transactions.

91. The Commission proposes to adopt a holding period for licensees acquiring spectrum in the 28 GHz, 37 GHz, and/or 39 GHz bands. In particular, the Commission seeks comment on our proposal to adopt a holding period that would restrict certain proposed secondary market transactions for mmW licensees necessary to support the spectrum aggregation policies the Commission adopted in the *Report and Order,* as well as our objective of ensuring that multiple providers will be able to access mmW spectrum as it becomes available.

92. The Commission proposes a period of three years, given the nascent nature of the frontier spectrum in the 28 GHz, 37 GHz, and 39 GHz bands and the likely rapid development of multiple use cases for this spectrum. While the Commission could establish a holding period tied to the length of the license term or build out period for licensees in these bands, a shorter three-year holding period that is half of the buildout period the Commission established for incumbent licensees in the 28 GHz and 39 GHz bands may best serve the public interest by allowing flexibility while still preventing entities from undermining our ex ante spectrum aggregation policies. The Commission seeks comment on our proposal. To the extent commenters support a longer holding period, the Commission seeks comment on how a longer holding period would better help the Commission achieve its objectives for the use of this spectrum. If a longer holding period is warranted, how long should it be? For example, should the length of the holding period be based on the 10 year license term and performance benchmarks for new licensees that the Commission adopted in the *Order* or would a different holding period be appropriate? The Commission asks commenters to address how it can best balance its general policy of promoting flexibility in secondary market transactions with our goals of encouraging competition and facilitating the deployment of new services and innovation to the benefit of consumers.

3. Spectrum Aggregation Limits for Additional Spectrum Bands

93. The Commission determined in the *Order* that grouping spectrum in the 28 GHz, 37 GHz, and 39 GHz bands together for purposes of applying these mobile spectrum holdings policies is appropriate in view of the similar technical characteristics and potential uses of spectrum in these bands. The Commission seeks comment on the proposal to apply spectrum aggregation policies generally in the bands the Commission proposes making available in this Further Notice. The objective of the spectrum aggregation polices the Commission adopted in the *Order* is to promote competitive conditions and help ensure that multiple providers have the ability to acquire mmW spectrum as it becomes available, while avoiding the excessive concentration of licenses. Further, to the extent these bands to be made available have similar technical characteristics and potential uses as the 28 GHz, 37 GHz, and 39 GHz bands, the Commission proposes to use

the approximately one-third threshold of the total amount of spectrum as our starting point but recognizes that its understanding of the appropriate approach for these bands is developing and that other thresholds may be appropriate. Is the approximately one-third threshold appropriate or are there alternative thresholds that the Commission should consider? What are the likely benefits and costs of our proposed threshold? The Commission asks interested parties to provide us with any alternative approaches to the appropriate spectrum aggregation policies for these bands as they become available.

E. 37.5–40 GHz Band Satellite Issues

1. Satellite Power Flux Density Limits

94. The Commission does not believe the current record is sufficient for us to conclude that authorizing satellites to operate at the higher PFD of −105 dBW/m2/MHz would be consistent with terrestrial use of the 37.5–40 GHz band. In theory, the same rain storm that impairs satellite reception might be able to shield earth stations if the satellite raises its power level; the problem is that rain will rarely be uniformly present throughout a spot beam's footprint, leaving at least some terrestrial stations unshielded or inadequately shielded by rain and, hence, vulnerable to any increase in the spot beam's PFD level. Unlike with respect to the 28 GHz band, the issue of satellite-terrestrial coexistence in the 39 GHz band has received relatively little attention.

95. At the same time, the Commission recognizes that Boeing has submitted a study which shows that coexistence is possible, even at the higher PFD level. Boeing's presentation suggests that terrestrial mobile units might be able to suppress interfering signals from satellites if the satellite signals arrive at sufficiently high angles of elevation. On the other hand, Boeing assumes a maximum distance of 200 meters between mobile units and base stations. The Commission believes the record would benefit from further development on this issue.

96. Accordingly, the Commission seeks further comment on whether there are any circumstances under which allowing FSS satellites in the 37.5–40 GHz band to operate at a higher PFD level than permitted under the existing rules would be consistent with terrestrial use of the 37.5–40 GHz band. If a higher PFD limit would be appropriate, what limit should the Commission adopt? Commenters should provide detailed technical studies that explicitly list the assumptions they made concerning both terrestrial and satellite operations. Studies should study both fixed and mobile terrestrial operations. If a commenter believes a study submitted by another commenter is not valid, it should list the specific assumptions or analysis that it believes are not valid and provide its own assumptions or analysis. Ultimately, the Commission believes the burden is on FSS interests to show that the higher PFD level is consistent with terrestrial use. Terrestrial interests do have an obligation to provide sufficient information concerning the nature of their systems to allow other parties to analyze the interference impact of a higher PFD level.

2. Authorizing Satellite User Equipment

97. The Commission seeks comment on the possibility of repealing the prohibition on satellite user equipment in the 37.5–40 GHz band. Initially, the Commission asks satellite interests to provide further information concerning the need and demand for user equipment in that band. The Commission notes that FSS user equipment can receive in the 40–42 GHz band, which is not licensed for terrestrial operations. Are there uses for which access to the 40–42 GHz band is insufficient? The Commission asks FSS providers to provide specific examples and data demonstrating the need for user equipment in the 37.5–40 GHz band.

98. Assuming a need exists, the Commission seeks comment on the appropriate manner of authorizing satellite user equipment. The Commission agrees with ViaSat's observation that because user equipment in this band would be receiving, it would not cause interference to terrestrial operations. One option would be to adopt ViaSat's proposal to allow FSS user equipment purely on a secondary basis at their own risk. If the Commission adopted that proposal, the Commission emphasizes that the equipment would truly be on a secondary basis and that FSS user equipment would have no expectation of interference protection. A variation on that option, based on the analysis Boeing has done, would be to require terrestrial operators to provide information on their deployments to FSS providers through a database, which the FSS providers could then use to determine where user equipment could operate without interference. The Commission asks other parties to comment on Boeing's technical analysis. To the extent Boeing relies on erroneous data concerning the nature of technical operations, the Commission asks terrestrial operators and equipment manufacturers to provide a specific analysis in response, with an explanation for the specific parameters used in their analysis. The Commission also seeks comment on whether the benefit to FSS operators of enhancing the ability to operate user equipment in the band outweighs the burden to UMFUS licensees of providing information on their deployments. The Commission asks both FSS operators and terrestrial operators to provide specific data on the relative costs and benefits.

F. Digital Station Identification

99. Currently, AM/FM/TV broadcasters are required to announce their call signs, as are land mobile station operators. Adopting a similar requirement for millimeter wave band operations could make it easier to identify and monitor signals, which in turn could make it easier to find sources of interference to these systems. Accordingly, the Commission seeks comment on requiring a digital identification (digital ID) for the millimeter wave band systems under consideration in this proceeding. Specifically, should operators be required to transmit an ID that is readily observable and decipherable by the Commission and/or other users that could be used to identify the operator/licensee of an unknown and/or interference source?

100. If so, the Commission seeks comment on the details of such a digital ID requirement. For example, should the ID requirement apply to all millimeter wave band services, or be limited to licensed services, non-licensed services, or fixed operations? Alternatively, should it apply to all transmissions above a certain power limit or antenna height, or be limited to transmissions with some other technical parameter? If so, what should those technical parameters be? If there is an ID requirement for unlicensed equipment, what should the content of the ID be? Should unlicensed equipment authorization holder or equipment user be required to register in a nationwide database that would allow either the FCC and/or anyone to search an ID for operator contact information? Should the ID be continuously broadcast, similar to consumer Wi-Fi routers, only when the transmitter is operational, or only at regular intervals? Finally, should there be a labeling (or software screen display) requirement for the equipment itself that identifies the owner/operator? If so, should the requirement apply to all millimeter wave band equipment, or

only to fixed or mobile equipment, only to outdoor equipment, or only to some other subset of millimeter wave band equipment?

G. Technical Issues

1. Antenna Height

101. The Commission seeks further comment on whether antenna height limits are appropriate and, if so, what thresholds and corresponding reductions in power should apply at higher antenna heights. Considering what future wireless networks are envisioned to be, are the antenna height thresholds and corresponding power reductions in the existing Part 24 (PCS) or Part 27 rules appropriate for future mmW mobile base stations? Based on what has been presented on the record, mobile mmW base stations in this band may be more likely deployed at street lamp post height, and will not be deployed at the heights of traditional mobile base station deployments. In that context is the 305 meter threshold currently in Part 27 valid or would lower thresholds be appropriate? Is there an alternative maximum height that should be considered? Conversely, given the existing PFD limits that the Commission has adopted to control interference at market boundaries and at the edge of an earth station contour, are additional antenna height restrictions and corresponding power reductions even necessary? The Commission tentatively proposes to adopt antenna height and power limits similar to those in our Part 27 rules. However, the Commission seeks comment on whether power limits based on antenna height are necessary and/or whether any modifications should be made to either the height thresholds or the power limits at specific heights that the Commission have proposed. The Commission also seeks comment on whether there would there be any benefit in requiring antenna downtilt for antennas above a certain height?

2. Minimum Bandwidth for Given BS/MS/Transportable Transmit Power Levels

102. For applications and technologies that operate under the umbrella of the next generation of wireless networks, is it worth considering a sub-set of networks that might operate with band widths less than 100 MHz and how the maximum power limits adopted should be evaluated? What minimum band width should be established for base stations, transportable station, and mobile station classes of equipment? Is there value in establishing these bandwidth scaling limits for mobile and transportable classes such as the Commission did for base stations? If so what should the minimum band width scaling factors be for these classes of equipment based on the power levels the Commission adopted in the *Report and Order*? What is the minimum bandwidth that should be established for these two classes of equipment in relation to the adopted transmit power limits? Should the establishment of these limits be comparable to the rules that currently exist for part 27 frequency bands?

3. Coordination Criteria at Market Borders for Fixed Point-to-Point Operations

103. In the *Report and Order,* in particular with smaller licensed areas, the Commission recognized that the existing coordination distances of 16 km for 39 GHz and 20 km for 28GHz result in coordination zones that encompass a large part of many license areas. In fact, in the context of 28 GHz county based licenses, the entire market area is subject to the coordination requirement in many cases. In adopting market border limits and coordination requirements our goal is to ensure that there is a mechanism in place to mitigate interference between adjacent area licensees without creating an unnecessary burden on licensees. While the Commission recognizes that under our rules adjacent area licensees are able to negotiate and agree to mutual terms and criteria that deviate from the market border and coordination limits imposed in our rules, the Commission also believes that the changes that the Commission adopted to market sizes warrants re-examination of the market boundary coordination requirements that were originally developed in the context of larger market sizes. Therefore, the Commission now seeks to create a record with an eye toward reducing the coordination burden on licensees. The Commission notes that in its comments in response to the *NPRM,* Sprint recommends that the Commission require an operator proposing to initiate new fixed operations to coordinate those operations with the adjacent block operator when a new fixed transmitter would be located within 3 km and within +/− 10 degrees of the receive azimuth of an existing fixed receiver, or a new fixed transmitter would be within 1 km of an existing fixed receiver, but outside the +/− 10 degree receive antenna main lobe, in order to avoid adjacent channel OOBE interference or brute force receiver overload. While Sprint's comments were in relation to adjacent channel interference a similar approach might be appropriate for co-channel coordination. The Commission seeks comment first on whether the existing coordination distances for traditional fixed point-to-point operations are still appropriate given smaller market area sizes. The Commission also seeks comment on whether the coordination distance should incorporate other technical criteria into factoring the distance. For example, should the coordination distances be dependent on the orientation of the fixed point-to-point antenna relative to the market boundary? Should the coordination distance be reduced in cases where a directional antenna is pointed away from the market boundary? Should the coordination distance be dependent on other technical factors such as the EIRP of the transmitting station, gain of the antenna, or other factors? The Commission requests comment on these issues. The Commission requests that commenters support any proposal with technical analysis.

4. Sharing Analysis and Modeling

104. The wireless industry, standards groups, government organizations, and academia are currently engaged in developing propagation models for millimeter wave bands. The National Institute of Standards and Technology (NIST) and the European Commission's 5G partnership with industry have active study groups looking at millimeter wave propagation modeling. Academia have published papers describing several models such as the Close In (CI) and alpha-beta-gamma (ABG) free space reference distance models. The Commission seeks comment on whether these or other models are appropriate propagation models to apply when analyzing inter-service interference between terrestrial-based transmitters and receivers of different services. There are several factors that are common to the interference effects in both directions to and from 5G stations, including antenna beam forming, the location and height of antennas, and the propagation distance and environment between other systems and the 5G stations. Lower gain 5G antennas that are mostly indoors in cluttered environments and at lower heights will reduce the degree of RF coupling in both directions, and therefore reduce the propagation path loss required to meet interference threshold limits. Which millimeter wave propagation models are most appropriate for sharing analyses where the interfering emitters may be assembled from a group of indoor and outdoor emitters? When applying transmitter or receiver isolation factors

such as antenna directionality, should a degree of statistical probability be associated with the factor versus the assumption of worse case interference? The Commission asks parties to submit propagation analysis and path loss models of 5G deployment in both indoor and outdoor environments for use in determining interference impact and potential mitigation.

105. If the terrestrial receiver or transmitter is fixed at a specific location then a terrain-based propagation loss model can be employed; what terrain based propagation models are most appropriate for millimeter wave analyses? When the terrestrial receiver is not at a known location, what are the most appropriate millimeter wave models to apply? How much isolation could one typically assume due to antenna beam forming techniques? What other interference mechanism, such as clutter, should be considered when modeling inter-service interference in millimeter wave bands? Generally, the Commission seeks further comment on millimeter wave propagation models appropriate for spectrum sharing studies between fixed, mobile and satellite systems, as well as active and passive services.

5. Part 15 Operation On-Board Aircraft in the 57–71 GHz Band

107. The Commission is seeking further technical analyses and sharing studies, specifically with respect to the various types of unlicensed applications envisioned on-board aircraft, the priority/order of their planned introduction, as well as their associated potential harmful interference profile with respect to passive sensor services. For example, is the intent to provide only for applications that are used by the aircraft itself to reduce weight by replacing cabling and wiring with radio for applications, such as for connecting inflight entertainment systems, seatback display consoles, or connecting with sensors used to monitor the health of the aircraft structure and its critical systems in wireless avionics intra-communication (WAIC)? Or is the intent to provide for the direct streaming of movies/news/internet service from ceiling-mounted access points to portable electronic devices carried aboard the aircraft by passengers in nearby seats? Are there additional inflight applications that commenters further envision?

108. What harmful interference profile could be expected from each of these various types of on-board aircraft provisions of 60 GHz transmitters? How much difference would the type of aircraft body make in providing additional protection to passive sensor services from operation of these transmitters? Should the Commission propose, as a first cautious step, to allow WiGig transmissions on-board aircraft only for certain applications, such as inflight entertainment provision beaming from seatback display to user-provided devices, because such transmissions would be at a very short distance (1–2 feet, or 30 to 60 cm), in a direct line-of-sight between each seatback display and user-provided device, with little risk of escaping through cabin windows? If the Commission were to prohibit the first WiGig channel (57.24–59.4 GHz) as CORF suggested to protect EESS, would this limitation ameliorate in any way the need to protect RAS, as WiGig devices will be using the rest of the spectrum from 59.4 GHz to 71 GHz? How would RAS and EESS be protected from potential WAIC applications using external structural sensors or cameras mounted on the outside of the aircraft structure to monitor the performance of the aircraft during various phases of aircraft operation (taxi, take-off, landing, cruise, etc.)? Commenters should provide detailed technical analyses, with possible real-world transmission scenarios on aircraft, including expected signal leakage in this particular frequency band through unshielded cabin windows for the various types of inflight applications (*e.g.*, entertainment provisions, WAIC provisions, etc.) in different aircraft body structures if the fuselage type and cabin window placements make a difference in signal shielding, etc., and any other additional harmful interference considerations involving use of 60 GHz transmitters on-board aircraft.

H. Initial Regulatory Flexibility Analysis

109. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in the *FNPRM.* Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines specified in the *FNPRM* for comments. The Commission will send a copy of this *FNPRM,* including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the *FNPRM* and IRFA (or summaries thereof) will be published in the **Federal Register**.

A. Need for, and Objectives of, the Proposed Rules

110. In this *FNPRM,* the Commission proposes to authorize mobile operations in the 24.25–24.45 and 24.75–25.25 GHz band (24 GHz band), the 31.8–33.4 GHz band (32 GHz band), the 42–42.5 GHz band (42 GHz band), the 47.2–50.2 GHz band (47 GHz band), the 50.4–52.6 GHz band (50 GHz band) and the 71–76 and 81–86 GHz bands (70/80 GHz bands). The Commission is also seeking comment on possible uses of bands above 95 GHz. Together with the bands that are the subject of our *Report and Order*—namely the 28, 37, 39 and 57–71 GHz bands, these bands are known as the "mmW bands".

111. Until recently, the mmW bands were generally considered unsuitable for mobile applications because of propagation losses at such high frequencies and the inability of mmW signals to propagate around obstacles. As increasing congestion has begun to fill the lower bands and carriers have resorted to smaller and smaller microcells in order to re-use the available spectrum, however, industry is taking another look at the mmW bands and beginning to realize that at least some of its presumed disadvantages can be turned to advantage. For example, short transmission paths and high propagation losses can facilitate spectrum re-use in microcellular deployments by limiting the amount of interference between adjacent cells. Furthermore, where longer paths are desired, the extremely short wavelengths of mmW signals make it feasible for very small antennas to concentrate signals into highly focused beams with enough gain to overcome propagation losses. The short wavelengths of mmW signals also make it possible to build multi-element, dynamic beam-forming antennas that will be small enough to fit into handsets—a feat that might never be possible at the lower, longer-wavelength frequencies below 6 GHz where cell phones operate today.

112. The Commission proposes to include the 24 GHz, 32 GHz, 42 GHz, 47 GHz, 50 GHz and 70/80 GHz bands in the Part 30 Upper Microwave Flexible Use Service. The Commission also proposes to add a mobile allocation in the 24 GHz and 32 GHz bands. This additional spectrum for mobile use will help ensure that the speed, capacity, and ubiquity of the nation's wireless networks keeps pace with the skyrocketing demand for mobile service. It could also make possible new types of services for consumers and businesses.

113. In proposing service rules for these bands, which include technical rules to protect against harmful interference, licensing rules to establish geographic license areas and spectrum block sizes, and performance requirements to promote robust buildout, the Commission advances toward enabling rapid and efficient deployment. The Commission does so by proposing flexible service, technical, assignment, and licensing rules for this spectrum, except where special provisions are necessary to facilitate shared use with other co-primary users.

114. For the 24 GHz, 32 GHz, 42 GHz, 47 GHz and 50 GHz bands the Commission proposes to assign PEA-based licenses through competitive bidding. In the 48.2–50.2 GHz portion of the 47 GHz band, the Commission proposes to require licensees to provide information on their facilities to enable sharing with FSS user equipment. Finally, in the 71–76/81–86 GHz bands, the Commission seeks comment on various systems managed by database operators which will coordinate use as between mmW base stations, fixed point-to-point links used for backhaul, and Federal operations.

115. A portion of the 24 GHz band is allocated for satellite service but is limited to only feeder links for the Broadcast Satellite Service (BSS), and the Commission has proposed to either retain existing coordination procedures or to adopt the sharing regime used for the 28 GHz band to manage interference between terrestrial and satellite operations. Meanwhile, the 47 GHz band is also allocated for satellite and is intended to be used for FSS user equipment. The Commission has proposed that FSS operation at 47 GHz be limited to individually licensed earth stations subject to the same sharing framework the Commission adopted in the 28 GHz band except with SAS-based sharing between terrestrial and satellite operations. Finally, although the 50 GHz band is also allocated for satellite, it contains no present satellite use and the Commission is exploring sharing mechanisms for the band in the future, including SAS.

116. Overall, these proposals are designed to provide for flexible use of this spectrum by allowing licensees to choose their type of service offerings, to encourage innovation and investment in mobile broadband use in this spectrum, and to provide a stable regulatory environment in which fixed, mobile, and satellite deployment would be able to develop through the application of flexible rules. The market-oriented licensing framework for these bands would ensure that this spectrum is efficiently utilized and will foster the development of new and innovative technologies and services, as well as encourage the growth and development of a wide variety of services, ultimately leading to greater benefits to consumers.

117. In the *FNPRM,* the Commission also seeks comment on various proposals for refining the rules the Commission have adopted in the *Report and Order.* The Commission seeks comment on various ways of developing the shared access framework the Commission has adopted for the 37–37.6 GHz band. That framework creates an innovative shared space that can be used by a wide variety of Federal and non-Federal users, by new entrants and by established operators—and smaller businesses in particular—to experiment with new technologies in the mmW space. The Commission proposes to adopt additional performance requirement metrics for uses such as Internet of Things and machine-to-machine communications. Adopting these additional metrics will allow licensees to use the mmW bands for innovative uses with the certainty that they can meet performance requirements and renew their licenses. For example, the Commission seeks further comment on whether the Commission should impose a "use-or-share" obligation on UMFUS licensees in order to efficiently make as much unused spectrum available as possible. Such a "use-or-share" regime could take varying forms, such as a fully dynamic sharing solution whereby opportunistic users could indefinitely deploy outside a licensee's geographic build-out area subject to the latter's potential expansion—as coordinated by a third-party database administrator; a modified shared access system whereby meeting a defined level of deployment in a set of geographic areas would foreclose their opportunistic use; and, an unlicensed shared access approach whereby opportunistic users would operate wherever licensees were not actually deployed.

118. The Commission seeks comment on whether the Commission can allow FSS satellites in the 37.5–40 GHz band to operate at higher power and transmit a higher power flux density at the Earth's surface. If the Commission can allow such higher power without causing interference to terrestrial operations, this change could allow FSS operators to make greater use of the band. The Commission also asks whether the Commission should repeal the prohibition on satellite (FSS) user equipment in the 37.5–40 GHz band and seek comment on whether terrestrial operators should have to divulge their deployments to FSS providers through a database in order to allow individual users to install their own receiving equipment without interfering with terrestrial operations. In addition, the Commission asks whether the Commission should adopt a requirement that millimeter wave band systems transmit an ID identifying themselves to enable better identification and control of sources of interfering signals much the same way that TV, radio or even WiFi systems presently identify themselves. Finally, the Commission seeks comment on revisions to the technical rules for the Upper Microwave Flexible Use Service, including revising coordination criteria between adjacent licensees for point-to-point operations; establishing a minimum bandwidth and bandwidth scaling factor corresponding to various power levels; proposing a reduction in transmit power limits responsive to increasing antenna height, and obtaining further information on millimeter wave propagation models, and whether Part 15 operations in the 57–71 GHz band can be allowed on board aircraft. These portions of the *FNPRM* will help ensure that licensees have maximum flexibility to operate while not causing interference to other licensees.

B. Legal Basis

119. The proposed action is authorized pursuant to Sections 1, 2, 3, 4, 5, 7, 10, 201, 225, 227, 301, 302, 302a, 303, 304, 307, 309, 310, 316, 319, 332, and 336 of the Communications Act of 1934, 47 U.S.C. 151, 152, 153, 154, 155, 157, 160, 201, 225, 227, 301, 302, 302a, 303, 304, 307, 309, 310, 316, 319, 332, 336 and Section 706 of the Telecommunications Act of 1996, as amended, 47 U.S.C. 1302.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

120. The RFA directs agencies to provide a description of, and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules and policies, if adopted. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A "small business concern" is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any

additional criteria established by the SBA.

D. Small Businesses, Small Organizations, and Small Governmental Jurisdictions

121. Our action may, over time, affect small entities that are not easily categorized at present. The Commission therefore describe here, at the outset, three comprehensive, statutory small entity size standards. First, nationwide, there are a total of approximately 28.2 million businesses, 99.7 percent of which are small, according to the SBA. In addition, a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." Nationwide, as of 2007, there were approximately 1,621,315 small organizations. Finally, the term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand." Census Bureau data for 2011 indicate that there were 89,476 local governmental jurisdictions in the United States. The Commission estimates that, of this total, as many as 88, 506 entities may qualify as "small governmental jurisdictions." Thus, the Commission estimates that most governmental jurisdictions are small.

1. Wireless Telecommunications Carriers (Except Satellite)

122. The appropriate size standard under SBA rules is for the category Wireless Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census Bureau data for 2012, show that there were 967 firms in this category that operated for the entire year. Of this total, 955 had employment of 999 or fewer, and 12 firms had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities that may be affected by our action.

2. Fixed Microwave Services

123. Microwave services include common carrier, private-operational fixed, and broadcast auxiliary radio services. They also include the Local Multipoint Distribution Service (LMDS), the Digital Electronic Message Service (DEMS), the 39 GHz Service (39 GHz), the 24 GHz Service, and the Millimeter Wave Service where licensees can choose between common carrier and non-common carrier status. At present, there are approximately 61,970 common carrier fixed licensees, 62,909 private and public safety operational-fixed licensees, 20,349 broadcast auxiliary radio licensees, 412 LMDS licenses, 35 DEMS licenses, 870 39 GHz licenses, and five 24 GHz licenses, and 408 Millimeter Wave licenses in the microwave services. The Commission has not yet defined a small business with respect to microwave services. For purposes of the FRFA, the Commission will use the SBA's definition applicable to Wireless Telecommunications Carriers (except satellite)—*i.e.*, an entity with no more than 1,500 persons is considered small. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census Bureau data for 2012, show that there were 967 firms in this category that operated for the entire year. Of this total, 955 had employment of 999 or fewer, and 12 firms had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities that may be affected by our proposed action. The Commission notes that the number of firms does not necessarily track the number of licensees. The Commission estimates that virtually all of the Fixed Microwave licensees (excluding broadcast auxiliary licensees) would qualify as small entities under the SBA definition.

3. Satellite Telecommunications and All Other Telecommunications

124. Two economic census categories address the satellite industry. The first category has a small business size standard of $32.5 million or less in average annual receipts, under SBA rules. The second also has a size standard of $32.5 million or less in annual receipts.

125. The category of Satellite Telecommunications "comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications." Census Bureau data for 2012 show that 333 Satellite Telecommunications firms operated for that entire year. Of this total, 275 firms had annual receipts of under $10 million, and 58 firms had receipts of $10 million to $24,999,999. Consequently, the Commission estimates that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

126. The second category, *i.e.*, "All Other Telecommunications," comprises "establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry." For this category, Census Bureau data for 2012 show that there were a total of 1442 firms that operated for the entire year. Of this total, 1400 firms had annual receipts of under $25 million and 42 firms had annual receipts of $25 million to $49,999,999. Consequently, the Commission estimates that the majority of All Other Telecommunications firms are small entities that might be affected by our action.

4. Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

127. The proposed rules relating to Part 15 operation pertain to manufacturers of unlicensed communications devices. The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: Transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment." The SBA has developed a small business size standard for firms in this category, which is: All such firms having 750 or fewer employees. According to Census Bureau data for 2007, there were a total of 939 establishments in this category that operated for part or all of the entire year. Of this total, 784 had less than 500 employees and 155 had more than 100 employees. Thus, under this size standard, the majority of firms can be considered small.

E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

128. The projected reporting, recordkeeping, and other compliance requirements proposed in the *FNPRM* will apply to all entities in the same manner. The revisions the Commission adopts should benefit small entities by giving them more information, more flexibility, and more options for gaining access to wireless spectrum.

129. Any applicants for UMFUS licenses will be required to file license applications using the Commission's automated ULS. ULS is an online electronic filing system that also serves as a powerful information tool, one that enables potential licensees to research applications, licenses, and antenna structures. It also keeps the public informed with the weekly public notices, FCC rulemakings, processing utilities, and a telecommunications glossary. UMFUS applicants that must submit long-form license applications must do so through ULS using Form 601, FCC Ownership Disclosure Information for the Wireless Telecommunications Services using FCC Form 602, and other appropriate forms.

130. Applicants in the UMFUS will be required to meet buildout requirements at the end of their initial license terms. In doing do, they will be required to provide information to the Commission on the facilities they have constructed, the nature of the service they are providing, and the extent to which they are providing coverage in their license area.

131. The Commission also proposes to require UMFUS licensees to provide information on their proposed operations in order to facilitate sharing with other authorized services. This may include the possibility that UMFUS licensees will have to digitally identify their stations in order to help identify and eliminate causes of interference. In the 48.2–50.2 GHz band, terrestrial licensees may have to report their deployment information to FSS providers to facilitate the deployment of FSS user equipment. The Commission seeks comment on the scope of the information to be provided and the manner in which it should be provided.

132. The Commission expects that all of the filing, recordkeeping and reporting requirements associated with the demands described above, including professional, accounting, engineering or survey services used in meeting these requirements will be the same for large and small businesses that intend to utilize these new UMFUS licenses, but the Commission seeks comment on any steps that could be taken to minimize any significant economic impact on small businesses.

F. Steps Taken To Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

133. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its approach, which may include the following four alternatives (among others): (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities. Accordingly, the Commission seeks comment on whether any of burdens associated the filing, recordkeeping and reporting requirements described above can be minimized for small businesses. In particular, the Commission seeks comment on whether any of the costs associated with our construction or performance requirements in these bands can be alleviated for small businesses.

134. The Commission intends to license the 24 GHz, 32 GHz, 42 GHz, and 50 GHz bands on a PEA basis, but the Commission will also permit partitioning and disaggregation by licensees in the mmW bands. As the Commission noted in the *Report and Order,* while PEAs are small enough to provide spectrum access opportunities for smaller carriers and PEAs could even be further disaggregated, PEAs also nest within, and may be aggregated to form, larger license areas. Therefore, the benefits and burdens resulting from assigning spectrum in PEA license areas would be equivalent for small and large businesses. Depending on the licensing mechanisms the Commission adopts for these bands, licensees may adjust their geographic coverage through auction or through the secondary markets. This proposal should enable providers, or any entities, whether large or small, providing service in the mmW bands to more easily adjust their spectrum to build their networks pursuant to individual business plans. And the Commission believes this ability to adjust spectrum holdings will make it easier for small entities to acquire or access spectrum. The Commission seeks comment from the public concerning whether these license area determinations would indeed benefit the small businesses or whether there are other alternatives the Commission should consider.

135. For UMFUS bands for which the Commission accept mutually exclusive initial applications, the Commission will resolve such applications by competitive bidding conducted pursuant to Part 1 Subpart Q of the Commission's rules, including rules governing designated entity preferences. In the *Report and Order,* the Commission adopted bidding credits for applicants for UMFUS licenses who qualify as small businesses. An entity with average annual gross revenues for the preceding three years not exceeding $55 million will qualify as a "small business" and be eligible to receive a 15 percent discount on its winning bid. An entity with average annual gross revenues for the preceding three years not exceeding $20 million will qualify as a "very small business" and be eligible to receive a 25 percent discount on its winning bid. The *FNPRM* seeks comment on whether to apply these same small business definitions and associated bidding credits to the auction of licenses in the additional bands the *FNPRM* proposes, as well as any other spectrum bands the Commission may subsequently decide to include in the UMFUS. The Commission believes providing small businesses and very small businesses with bidding credits, in addition to the protections built into the auction rules themselves should provide an economic benefit to small businesses by making it easier for them to acquire or access spectrum in these bands. The Commission seeks comment on this assessment and on whether there are any alternative steps the Commission could take to better assist small businesses.

136. In the *Report and Order,* the Commission adopted service rules that will permit licensees the flexibility to provide any fixed or mobile service that is consistent with their spectrum allocation. The Commission proposes that the same flexibility shall apply to the 24 GHz, 32 GHz, 42 GHz, 47 GHz, and 50 GHz bands and the Commission seeks comment concerning whether this flexibility will benefit small businesses by giving them more avenues for gaining access to valuable wireless spectrum. Finally, as noted above, the Commission is proposing to create a SAS-based regulatory framework in the 70/80 GHz band that will permit an innovative shared space in these bands. The SAS serves as an advanced, highly automated frequency coordinator across the band, potentially allowing this shared space to be used by a wide

variety of Federal and non-Federal users, by new entrants, by established operators, and small businesses in particular—to experiment with new technologies in the mmW space and innovate. Our proposals require that small businesses register with an SAS and comply with the rules established for the service and in return they receive the ability to access spectrum currently unavailable to them. The Commission believes this should constitute a significant benefit for small businesses, and the Commission seeks comment on this proposal.

137. The technical rules the Commission now proposes will allow licensees of mmW band spectrum to operate while also protecting licensees of nearby spectrum, some of whom are small entities, from harmful interference, and the Commission also seeks comment on these proposals.

J. Federal Rules That May Duplicate, Overlap, or Conflict With the Proposed Rules

138. None.

List of Subjects in 47 CFR Parts 2, 25, 30, and 101

Reporting and recordkeeping requirements, Communications equipment.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR parts 2, 25, 30 and 101 as follows:

PART 2—FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

■ 1. The authority citation for part 2 continues to read as follows:

Authority: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

■ 2. Amend § 2.106, the Table of Frequency Allocations, by revising pages 54, 56, and 58 through 62 to read as follows:

§ 2.106 Table of Frequency Allocations.

* * * * *

24-24.05 AMATEUR AMATEUR-SATELLITE 5.150			24-24.05 5.150 US211	24-24.05 AMATEUR AMATEUR-SATELLITE 5.150 US211	ISM Equipment (18) Amateur Radio (97)
24.05-24.25 RADIOLOCATION Amateur Earth exploration-satellite (active) 5.150			24.05-24.25 RADIOLOCATION G59 Earth exploration-satellite (active) 5.150	24.05-24.25 Amateur Earth exploration-satellite (active) Radiolocation 5.150	RF Devices (15) ISM Equipment (18) Private Land Mobile (90) Amateur Radio (97)
24.25-24.45 FIXED	24.25-24.45 RADIONAVIGATION	24.25-24.45 FIXED MOBILE RADIONAVIGATION	24.25-24.45	24.25-24.45 FIXED MOBILE	RF Devices (15) Upper Microwave Flexible Use (30)
24.45-24.65 FIXED INTER-SATELLITE	24.45-24.65 INTER-SATELLITE RADIONAVIGATION 5.533	24.45-24.65 FIXED INTER-SATELLITE MOBILE RADIONAVIGATION 5.533	24.45-24.65 INTER-SATELLITE RADIONAVIGATION 5.533		RF Devices (15) Satellite Communications (25)
24.65-24.75 FIXED FIXED-SATELLITE (Earth-to-space) 5.532B INTER-SATELLITE	24.65-24.75 INTER-SATELLITE RADIOLOCATION-SATELLITE (Earth-to-space)	24.65-24.75 FIXED FIXED-SATELLITE (Earth-to-space) 5.532B INTER-SATELLITE MOBILE 5.533	24.65-24.75 INTER-SATELLITE RADIOLOCATION-SATELLITE (Earth-to-space)		
24.75-25.25 FIXED FIXED-SATELLITE (Earth-to-space) 5.532B	24.75-25.25 FIXED-SATELLITE (Earth-to-space) 5.535	24.75-25.25 FIXED FIXED-SATELLITE (Earth-to-space) 5.535 MOBILE		24.75-25.25 FIXED FIXED-SATELLITE (Earth-to-space) NG535 MOBILE	RF Devices (15) Satellite Communications (25) Upper Microwave Flexible Use (30)
25.25-25.5 FIXED INTER-SATELLITE 5.536 MOBILE Standard frequency and time signal-satellite (Earth-to-space)			25.25-25.5 FIXED INTER-SATELLITE 5.536 MOBILE Standard frequency and time signal-satellite (Earth-to-space)	25.25-25.5 Inter-satellite 5.536 Standard frequency and time signal-satellite (Earth-to-space)	RF Devices (15)
25.5-27 EARTH EXPLORATION-SATELLITE (space-to-Earth) 5.536B FIXED INTER-SATELLITE 5.536 MOBILE SPACE RESEARCH (space-to-Earth) 5.536C Standard frequency and time signal-satellite (Earth-to-space) 5.536A			25.5-27 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED INTER-SATELLITE 5.536 MOBILE SPACE RESEARCH (space-to-Earth) Standard frequency and time signal-satellite (Earth-to-space) 5.536A US258	25.5-27 Inter-satellite 5.536 Standard frequency and time signal-satellite (Earth-to-space) 5.536A US258	Page 54

31-31.3 FIXED 5.338A 5.543A MOBILE Standard frequency and time signal-satellite (space-to-Earth) Space research 5.544 5.545 5.149			31-31.3 Standard frequency and time signal-satellite (space-to-Earth) US211 US342	31-31.3 FIXED NG60 MOBILE Standard frequency and time signal-satellite (space-to-Earth) US211 US342	Fixed Microwave (101)
31.3-31.5 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340			31.3-31.8 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246		
31.5-31.8 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.546	31.5-31.8 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	31.5-31.8 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149			
31.8-32 FIXED 5.547A RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth) 5.547 5.547B 5.548			31.8-32.3 RADIONAVIGATION US69 SPACE RESEARCH (deep space) (space-to-Earth) US262 5.548 US211	31.8-32.3 FIXED MOBILE SPACE RESEARCH (deep space) (space-to-Earth) US262 5.548 US211	Upper Microwave Flexible Use (30)
32-32.3 FIXED 5.547A RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth) 5.547 5.547C 5.548					
32.3-33 FIXED 5.547A INTER-SATELLITE RADIONAVIGATION 5.547 5.547D 5.548			32.3-33 INTER-SATELLITE US278 RADIONAVIGATION US69 5.548	32.3-33 FIXED INTER-SATELLITE US278 MOBILE RADIONAVIGATION US69 5.548	Upper Microwave Flexible Use (30) Aviation (87)
33-33.4 FIXED 5.547A RADIONAVIGATION 5.547 5.547E			33-33.4 RADIONAVIGATION US69 US360 G117	33-33.4 FIXED MOBILE RADIONAVIGATION US69 US360	
33.4-34.2 RADIOLOCATION 5.549			33.4-34.2 RADIOLOCATION US360 G117	33.4-34.2 Radiolocation US360	Private Land Mobile (90)
34.2-34.7 RADIOLOCATION SPACE RESEARCH (deep space) (Earth-to-space) 5.549			34.2-34.7 RADIOLOCATION SPACE RESEARCH (deep space) (Earth-to-space) US262 US360 G34 G117	34.2-34.7 Radiolocation Space research (deep space) (Earth-to-space) US262 US360	

40-40.5 EARTH EXPLORATION-SATELLITE (Earth-to-space) FIXED FIXED-SATELLITE (space-to-Earth) 5.516B MOBILE MOBILE-SATELLITE (space-to-Earth) SPACE RESEARCH (Earth-to-space) Earth exploration-satellite (space-to-Earth)			40-40.5 EARTH EXPLORATION-SATELLITE (Earth-to-space) FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) SPACE RESEARCH (Earth-to-space) Earth exploration-satellite (space-to-Earth) G117	40-40.5 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth)	Satellite Communications (25)
40.5-41 FIXED FIXED-SATELLITE (space-to-Earth) BROADCASTING BROADCASTING-SATELLITE Mobile 5.547	40.5-41 FIXED FIXED-SATELLITE (space-to-Earth) 5.516B BROADCASTING BROADCASTING-SATELLITE Mobile Mobile-satellite (space-to-Earth) 5.547	40.5-41 FIXED FIXED-SATELLITE (space-to-Earth) BROADCASTING BROADCASTING-SATELLITE Mobile 5.547	40.5-41 FIXED-SATELLITE (space-to-Earth) Mobile-satellite (space-to-Earth) US211 G117	40.5-41 FIXED-SATELLITE (space-to-Earth) BROADCASTING BROADCASTING-SATELLITE Fixed Mobile Mobile-satellite (space-to-Earth) US211	
41-42.5 FIXED FIXED-SATELLITE (space-to-Earth) 5.516B BROADCASTING BROADCASTING-SATELLITE Mobile 5.547 5.551F 5.551H 5.551I			41-42 US211	41-42 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE BROADCASTING BROADCASTING-SATELLITE US211	
			42-42.5 FIXED MOBILE US211	42-42.5 FIXED MOBILE US211	Upper Microwave Flexible Use (30)
42.5-43.5 FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149 5.547			42.5-43.5 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile RADIO ASTRONOMY US342	42.5-43.5 RADIO ASTRONOMY US342	
43.5-47 MOBILE 5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554			43.5-45.5 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) G117	43.5-45.5	
			45.5-46.9 MOBILE MOBILE-SATELLITE (Earth-to-space) RADIONAVIGATION-SATELLITE 5.554		RF Devices (15)

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47-47.2 AMATEUR AMATEUR-SATELLITE			47-48.2	47-47.2 AMATEUR AMATEUR-SATELLITE	Amateur Radio (97)
47.2-47.5 FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE 5.552A				47.2-48.2 FIXED FIXED-SATELLITE (Earth-to-space) US297 MOBILE	Satellite Communications (25) Upper Microwave Flexible Use (30)
47.5-47.9 FIXED FIXED-SATELLITE (Earth-to-space) 5.552 (space-to-Earth) 5.516B 5.554A MOBILE	47.5-47.9 FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE				
47.9-48.2 FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE 5.552A					
48.2-48.54 FIXED FIXED-SATELLITE (Earth-to-space) 5.552 (space-to-Earth) 5.516B 5.554A 5.555B MOBILE	48.2-50.2 FIXED FIXED-SATELLITE (Earth-to-space) 5.338A 5.516B 5.552 MOBILE 5.149 5.340 5.555		48.2-50.2 FIXED FIXED-SATELLITE (Earth-to-space) US156 US297 MOBILE US264 5.555 US342		
48.54-49.44 FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE 5.149 5.340 5.555					
49.44-50.2 FIXED FIXED-SATELLITE (Earth-to-space) 5.338A 5.552 (space-to-Earth) 5.516B 5.554A 5.555B MOBILE					
50.2-50.4 EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340			50.2-50.4 EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) US246		

50.4-51.4 FIXED FIXED-SATELLITE (Earth-to-space) 5.338A MOBILE Mobile-satellite (Earth-to-space)	50.4-51.4 FIXED FIXED-SATELLITE (Earth-to-space) US156 MOBILE MOBILE-SATELLITE (Earth-to-space) G117	50.4-51.4 FIXED FIXED-SATELLITE (Earth-to-space) US156 MOBILE MOBILE-SATELLITE (Earth-to-space)	Upper Microwave Flexible Use (30)
51.4-52.6 FIXED 5.338A MOBILE 5.547 5.556	51.4-52.6 FIXED US157 MOBILE		
52.6-54.25 EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340 5.556	52.6-54.25 EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) US246		
54.25-55.78 EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.556A SPACE RESEARCH (passive) 5.556B	54.25-55.78 EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.556A SPACE RESEARCH (passive)		Satellite Communications (25)
55.78-56.9 EARTH EXPLORATION-SATELLITE (passive) FIXED 5.557A INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547 5.557	55.78-56.9 EARTH EXPLORATION-SATELLITE (passive) FIXED US379 INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) US353 US532		
56.9-57 EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.558A MOBILE 5.558 SPACE RESEARCH (passive) 5.547 5.557	56.9-57 EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE G128 MOBILE 5.558 SPACE RESEARCH (passive) US532	56.9-57 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE 5.558 SPACE RESEARCH (passive) US532	
57-58.2 EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547 5.557	57-58.2 EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) US532		RF Devices (15) Satellite Communications (25)
58.2-59 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 5.547 5.556	58.2-59 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) US353 US354		RF Devices (15)

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International Table			United States Table		FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
59-59.3 EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 RADIOLOCATION 5.559 SPACE RESEARCH (passive)			59-59.3 EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 RADIOLOCATION 5.559 SPACE RESEARCH (passive) US353	59-59.3 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE 5.558 RADIOLOCATION 5.559 SPACE RESEARCH (passive) US353	RF Devices (15)
59.3-64 FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559 5.138			59.3-64 FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559 5.138 US353	59.3-64 FIXED MOBILE 5.558 RADIOLOCATION 5.559 5.138 US353	RF Devices (15) ISM Equipment (18)
64-65 FIXED INTER-SATELLITE MOBILE except aeronautical mobile 5.547 5.556			64-65 FIXED INTER-SATELLITE MOBILE except aeronautical mobile	64-65 FIXED MOBILE except aeronautical mobile	RF Devices (15)
65-66 EARTH EXPLORATION-SATELLITE FIXED INTER-SATELLITE MOBILE except aeronautical mobile SPACE RESEARCH 5.547			65-66 EARTH EXPLORATION-SATELLITE FIXED MOBILE except aeronautical mobile SPACE RESEARCH	65-66 EARTH EXPLORATION-SATELLITE FIXED INTER-SATELLITE MOBILE except aeronautical mobile SPACE RESEARCH	RF Devices (15) Satellite Communications (25)
66-71 INTER-SATELLITE MOBILE 5.553 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554			66-71 MOBILE 5.553 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554	66-71 INTER-SATELLITE MOBILE 5.553 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554	
71-74 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth)			71-74 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) US389		Upper Microwave Flexible Use (30)
74-76 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE BROADCASTING BROADCASTING-SATELLITE Space research (space-to-Earth) 5.561			74-76 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Space research (space-to-Earth) US389	74-76 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE BROADCASTING BROADCASTING-SATELLITE Space research (space-to-Earth) US389	RF Devices (15) Upper Microwave Flexible Use (30)

76-77.5 RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) 5.149	76-77.5 RADIO ASTRONOMY RADIOLOCATION Space research (space-to-Earth) US342	76-77 RADIO ASTRONOMY RADIOLOCATION Amateur Space research (space-to-Earth) US342	RF Devices (15)
		77-77.5 RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) US342	RF Devices (15) Amateur Radio (97)
77.5-78 AMATEUR AMATEUR-SATELLITE Radio astronomy Space research (space-to-Earth) 5.149	77.5-78 Radio astronomy Space research (space-to-Earth) US342	77.5-78 AMATEUR AMATEUR-SATELLITE Radio astronomy Space research (space-to-Earth) US342	
78-79 RADIOLOCATION Amateur Amateur-satellite Radio astronomy Space research (space-to-Earth) 5.149 5.560	78-79 RADIO ASTRONOMY RADIOLOCATION Space research (space-to-Earth) 5.560 US342	78-79 RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) 5.560 US342	
79-81 RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) 5.149	79-81 RADIO ASTRONOMY RADIOLOCATION Space research (space-to-Earth) US342	79-81 RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) US342	
81-84 FIXED 5.338A FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY Space research (space-to-Earth) 5.149 5.561A	81-84 FIXED FIXED-SATELLITE (Earth-to-space) US297 MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY Space research (space-to-Earth) US161 US342 US389		RF Devices (15) Upper Microwave Flexible Use (30)
84-86 FIXED 5.338A FIXED-SATELLITE (Earth-to-space) 5.561B MOBILE RADIO ASTRONOMY 5.149	84-86 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY US161 US342 US389		

PART 25—SATELLITE COMMUNICATIONS

■ 3. The authority citation for part 25 continues to read as follows:

Authority: Interprets or applies Sections 4, 301, 302, 303, 307, 309, 319, 332, 705, and 721 of the Communications Act, as amended, 47 U.S.C. 154, 301, 302, 303, 307, 309, 319, 332, 605, and 721, unless otherwise noted.

■ 4. Amend § 25.208 by revising paragraphs (q) and (r) to read as follows:

§ 25.208 Power flux density limits.

* * * * *

(q) In the band 37.5–40.0 GHz, the power flux-density at the Earth's surface produced by emissions from a geostationary space station for all methods of modulation shall not exceed the following values:

-127 dB(W/m^2) in any 1 MHz band for angles of arrival between 0 and 5 degrees above the horizontal plane;

$-127 + 4/3 (\delta - 5)$ dB(W/m^2) in any 1 MHz band for angles of arrival δ (in degrees) between 5 and 20 degrees above the horizontal plane; and

$-107 + 0.4 (\delta - 20)$ dB(W/m^2) in any 1 MHz band for angles of arrival δ (in degrees) between 20 and 25 degrees above the horizontal plane;

-105 dB(W/m^2) in any 1 MHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

(r) In the band 37.5–40.0 GHz, the power flux-density at the Earth's surface produced by emissions from a non-geostationary space station for all methods of modulation shall not exceed the following values:

-120 dB(W/m^2) in any 1 MHz band for angles of arrival between 0 and 5 degrees above the horizontal plane;

$-120 + 0.75 (\delta - 5)$ dB(W/m^2) in any 1 MHz band for angles of arrival δ (in degrees) between 5 and 25 degrees above the horizontal plane; and

-105 dB(W/m^2) in any 1 MHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

* * * * *

■ 5. Add part 30 to read as follows:

PART 30—UPPER MICROWAVE FLEXIBLE USE SERVICE

Subpart A—General

Sec.
30.1 Creation of upper microwave flexible use service.
30.2 Definitions.
30.3 Eligibility.
30.4 Frequencies.
30.5 Service areas.
30.6 Permissible communications.
30.7 37–37.6 GHz Band—Shared Coordinated Service
30.8 5G Provider Cybersecurity Statement Requirements

Subpart B—Applications and Licenses

30.101 Initial authorizations.
30.102 Authorization of operation of local area networks in 37–38.6 GHz band.
30.103 Transition of existing local multipoint distribution service and 39 GHz licenses.
30.104 License term.
30.105 Construction requirements.
30.106 Geographic partitioning and spectrum disaggregation.
30.107 Discontinuance of service.

Subpart C—Technical Standards

30.201 Equipment authorization.
30.202 Power limits.
30.203 Emission limits.
30.204 Field strength limits.
30.205 Federal coordination requirements.
30.206 International coordination.
30.207 RF safety.
30.208 Operability.
30.209 Duplexing.
30.210 Information sharing requirements in the 48.2–50.2 GHz band.

Subpart D—Competitive Bidding Procedures

30.301 Upper microwave flexible use service subject to competitive bidding.
30.302 Designated entities and bidding credits.

Subpart E—Special Provisions for Fixed Point-to-Point, Fixed Point-to-Multipoint Hub Stations, and Fixed Point-to-Multipoint User Stations

30.401 Permissible service.
30.402 Frequency tolerance.
30.403 Bandwidth.
30.404 Emission limits.
30.405 Transmitter power limitations.
30.406 Directional antennas.
30.407 Antenna Polarization.

Subpart F—Shared operation in the 71–76 GHz and 81/86 GHz bands

30.501 Scope.
30.502 Authorization required.
30.503 Frequency assignments.
30.504 Technical rules.
30.505 Protection of Federal incumbents.
30.506 Priority Access Licenses.
30.507 General Access.
30.508 Spectrum access system purposes and functionality.
30.509 Registration, authentication, and authorization of devices.

Authority: 47 U.S.C. 151, 152, 153, 154, 301, 303, 304, 307, 309, 310, 316, 332, 1302.

§ 30.1 Creation of upper microwave flexible use service, scope and authority.

As of [effective date of final rule], Local Multipoint Distribution Service licenses for the 27.5–28.35 GHz band, and licenses issued in the 38.6–40 GHz band under the rules in part 101 of this chapter shall be reassigned to the Upper Microwave Flexible Use Service. Local Multipoint Distribution Service licenses in bands other than 27.5–28.35 GHz shall remain in that service and shall be governed by the part 101 of this chapter applicable to that service.

§ 30.2 Definitions.

The following definitions apply to this part:

Authorized bandwidth. The maximum width of the band of frequencies permitted to be used by a station. This is normally considered to be the necessary or occupied bandwidth, whichever is greater. (See § 2.202 of this chapter).

Authorized frequency. The frequency, or frequency range, assigned to a station by the Commission and specified in the instrument of authorization.

Fixed satellite earth station. An earth station intended to be used at a specified fixed point.

Local Area Operations. Operations confined to physical facility boundaries, such as a factory.

Point-to-Multipoint Hub Station. A fixed point-to-multipoint radio station that provides one-way or two-way communication with fixed Point-to-Multipoint Service User Stations.

Point-to-Multipoint User Station. A fixed radio station located at users' premises, lying within the coverage area of a Point-to-Multipoint Hub station, using a directional antenna to receive one-way communications from or providing two-way communications with a fixed Point-to-Multipoint Hub Station.

Point-to-Multipoint Service. A fixed point-to-multipoint radio service consisting of point-to-multipoint hub stations that communicate with fixed point-to-multipoint user stations.

Point-to-point station. A station that transmits a highly directional signal from a fixed transmitter location to a fixed receive location.

Portable device. Transmitters designed to be used within 20 centimeters of the body of the user.

Prior coordination. A bilateral process conducted prior to filing applications which includes the distribution of the technical parameters of a proposed radio system to potentially affected parties for their evaluation and timely response.

Secondary operations. Radio communications which may not cause interference to operations authorized on a primary basis and which are not protected from interference from these primary operations

Transportable Station. Transmitting equipment that is not intended to be used while in motion, but rather at stationary locations.

Universal Licensing System. The Universal Licensing System (ULS) is the consolidated database, application filing system, and processing system for all Wireless Radio Services. ULS supports electronic filing of all applications and related documents by applicants and licensees in the Wireless Radio Services, and provides public access to licensing information.

§ 30.3 Eligibility.

Any entity who meets the technical, financial, character, and citizenship qualifications that the Commission may require in accordance with such Act, other than those precluded by section 310 of the Communications Act of 1934, as amended, 47 U.S.C. 310, is eligible to hold a license under this part.

§ 30.4 Frequencies.

The following frequencies are available for assignment in the Upper Microwave Flexible Use Service:

(a) 27.5 GHz–28.35 GHz band—27.5–27.925 GHz and 27.925–28.35 GHz.

(b) 38.6–40 GHz band:

(1) New channel plan:

Channel No.	Frequency band limits (MHz)
1	38,600–38,800
2	38,800–39,000
3	39,000–39,200
4	39,200–39,400
5	39,400–39,600
6	39,600–39,800
7	39,800–40,000

(2) Pending transition to the new channel plan, existing 39 GHz licensees licensed under part 101 of this chapter may continue operating on the following channel plan:

Channel Group A		Channel Group B	
Channel No.	Frequency band limits (MHz)	Channel No.	Frequency band limits (MHz)
1–A	38,600–38,650	1–B	39,300–39,350
2–A	38,650–38,700	2–B	39,350–39,400
3–A	38,700–38,750	3–B	39,400–39,450
4–A	38,750–38,800	4–B	39,450–39,500
5–A	38,800–38,850	5–B	39,500–39,550
6–A	38,850–38,900	6–B	39,550–39,600
7–A	38,900–38,950	7–B	39,600–39,650
8–A	38,950–39,000	8–B	39,650–39,700
9–A	39,000–39,050	9–B	39,700–39,750
10–A	39,050–39,100	10–B	39,750–39,800
11–A	39,100–39,150	11–B	39,800–39,850
12–A	39,150–39,200	12–B	39,850–39,900
13–A	39,200–39,250	13–B	39,900–39,950
14–A	39,250–39,300	14–B	39,950–40,000

(c) 37–38.6 GHz band: 37,600–37,800 MHz; 37,800–38,000 MHz; 38,000–38,200 MHz; 38,200–38,400 MHz, and 38,400–38,600 MHz. The 37,000–37,600 MHz band segment shall be available on a site-specific, coordinated shared basis with eligible Federal entities;

(d) 24.25–24.45 GHz band:

(e) 24.75–25.25 GHz band: 24.75–25.00 GHz, 25.00–25.25 GHz;

(f) 31.8–33.4 GHz band:

Channel No.	Frequency
1	31,000–32,000
2	32,000–32,200
3	32,200–32,400
4	32,400–32,600
5	32,600–32,800
6	32,800–33,000
7	33,000–33,200
8	33,200–33,400

(g) 42–42.5 GHz band:

(h) 47.2–50.2 GHz band:

Channel No.	Frequency
1	47,200–47,700
2	47,700–48,200
3	48,200–48,700
4	48,700–49,200
5	49,200–49,700
6	49,700–50,200

(i) 50.4–52.6 GHz band:

Channel No.	Frequency
1	50,400–50,600
2	50,600–50,800
3	50,800–51,000
4	51,000–51,200
5	51,200–51,400
6	51,400–51,600
7	51,600–51,800
8	51,800–52,000
9	52,000–52,200
10	52,200–52,400
11	52,400–52,600

(j) The 71–76 GHz and 81–86 GHz bands shall be available on a shared basis pursuant to the rules in subpart F of this part.

§ 30.5 Service areas.

(a) Except as noted in paragraphs (b) and (c) of this section, and except for the shared 37–37.6 GHz, 71–76 GHz, and 81–86 GHz bands, the service areas for the Upper Microwave Flexible Use Service are Partial Economic Areas.

(b) For the 27.5–28.35 GHz band, the service areas shall be counties.

(c) Common Carrier Fixed Point-to-Point Microwave Stations licensed in the 38.6–40 GHz bands licensed with Rectangular Service Areas shall maintain their Rectangular Service Area as defined in their authorization. The frequencies associated with Rectangular Service Area authorizations that have expired, cancelled, or otherwise been recovered by the Commission will automatically revert to the applicable county licensee.

(d) In the 37.5–40 GHz band, Upper Microwave Flexible Use Service licensees shall not place facilities within the protection zone of Fixed-Satellite Service earth stations authorized pursuant to § 25.136 of this chapter, absent consent from the Fixed-Satellite Service earth station licensee.

§ 30.6 Permissible communications.

(a) A licensee in the frequency bands specified in § 30.4 may provide any services for which its frequency bands are allocated, as set forth in the non-Federal Government column of the Table of Frequency Allocations in § 2.106 of this chapter (column 5).

(b) Fixed-Satellite Service shall be provided in a manner consistent with part 25 of this chapter.

§ 30.7 37–37.6 GHz Band—Shared Coordinated Service.

(a) The 37–37.6 GHz band will be available for site-based registrations on a coordinated basis with co-equal eligible Federal entities.

(b) Any non-Federal entity meeting the eligibility requirements of § 30.3 of this part may operate equipment that complies with the technical rules of this part pursuant to a Shared Access License.

(c) Licensees in the 37–37.6 GHz band must register their individual base stations and access points prior to placing them in operation.

(d) The minimum authorized channel bandwidth in this band is 100 megahertz.

(e) Registered non-Federal sites must be put placed service within seven days of coordination.

(f) Equipment in this band must be capable of notifying the database that it is active on the channel. At least once every seven days, the equipment must be capable of notifying the coordination mechanism that the equipment is active and operating. If the equipment fails to make such a notification, the registration to operate that equipment is automatically terminated.

(g) Federal licensees may claim access to 200 megahertz of spectrum in this area on a priority basis.

§ 30.8 5G Provider Cybersecurity Statement Requirements.

(a) *Statement.* Each Upper Microwave Flexible Use Service licensee is required to submit to the Commission a Statement describing its network security plans and related information, which shall be signed by a senior executive within the licensee's organization with personal knowledge of the security plans and practices within the licensee's organization. The Statement must contain, at a minimum, the following elements:

(1) *Security Approach.* A high-level, general description of the licensee's approach designed to safeguard the planned network's confidentiality, integrity, and availability, with respect to communications from:

(i) A device to the licensee's network;

(ii) One element of the licensee's network to another element on the licensee's network;

(iii) The licensee's network to another network; and

(iv) Device to device (with respect to telephone voice and messaging services).

(2) *Cybersecurity Coordination.* A high-level, general description of the licensee's anticipated approach to assessing and mitigating cyber risk induced by the presence of multiple participants in the band. This should include the high level approach taken toward ensuring consumer network confidentiality, integrity, and availability security principles, are to be protected in each of the following use cases:

(i) Communications between a wireless device and the licensee's network;

(ii) Communications within and between each licensee's network;

(iii) Communications between mobile devices that are under end-to-end control of the licensee; and

(iv) Communications between mobile devices that are not under the end-to-end control of the licensee;

(3) *Cybersecurity Standards and Best Practices.* A high-level description of relevant cybersecurity standards and practices to be employed, whether industry-recognized or related to some other identifiable approach;

(4) *Participation With Standards Bodies, Industry-Led Organizations.* A description of the extent to which the licensee participates with standards bodies or industry-led organizations pursuing the development or maintenance of emerging security standards and/or best practices;

(5) *Other Security Approaches.* The high-level identification of any other approaches to security, unique to the services and devices the licensee intends to offer and deploy; and

(6) *Plans With Information Sharing and Analysis Organizations.* Plans to incorporate relevant outputs from Information Sharing and Analysis Organizations (ISAOs) as elements of the licensee's security architecture. Plans should include comment on machine-to-machine threat information sharing, and any use of anticipated standards for ISAO-based information sharing.

(b) *Timing.* Each Upper Microwave Flexible Use Service licensee shall submit this *Statement* to the Commission within three years after grant of the license, but no later than six months prior to deployment.

(c) *Definitions.* The following definitions apply to this section:

(i) *Confidentiality.* The protection of data from unauthorized access and disclosure, both while at rest and in transit.

(ii) *Integrity.* The protection against the unauthorized modification or destruction of information.

(iii) *Availability.* The accessibility and usability of a network upon demand.

Subpart B—Applications and Licenses

§ 30.101 Initial authorizations.

Except with respect to in the 37–37.6 GHz band, an applicant must file a single application for an initial authorization for all markets won and frequency blocks desired. Initial authorizations shall be granted in accordance with § 30.4. Applications for individual sites are not required and will not be accepted, except where required for environmental assessments, in accordance with §§ 1.1301 through 1.1319 of this chapter.

§ 30.103 Transition of existing local multipoint distribution service and 39 GHz licenses.

Local Multipoint Distribution Service licenses in the 27.5–28.35 GHz band issued on a Basic Trading Area basis shall be disaggregated into county-based licenses and 39 GHz licenses issued on an Economic Area basis shall be disaggregated into Partial Economic Area-based licenses on [effective date of final rule]. For each county in the Basic Trading Area or Partial Economic Area in the Economic Area which is part of the original license, the licensee shall receive a separate license. If there is a co-channel Rectangular Service Area licensee within the service area of a 39 GHz Economic Area licensee, the disaggregated license shall not authorize operation with the service area of the Rectangular Service Area license.

§ 30.104 License term.

Initial authorizations will have a term not to exceed ten years from the date of initial issuance or renewal.

§ 30.105 Construction requirements.

(a) Upper Microwave Flexible Use Service licensees must make a buildout showing as part of their renewal applications. Licensees relying on mobile or point-to-multipoint service to demonstrate that they are providing reliable signal coverage and service to at least 40 percent of the population within the service area of the licensee, and that they are using facilities to provide service in that area either to customers or for internal use. Licensees relying on point-to-point service must demonstrate that they have four links operating and providing service, either to customers or for internal use. If the population within the license area is equal to or less than 268,000. If the population within the license area is greater than 268,000, a licensee relying on point-to-point service must demonstrate it has at least one link in operation and providing service for each 67,000 population within the license area.

(b) Showings that rely on a combination of multiple types of service will be evaluated on a case-by-case basis.

(c) If a licensee in this service is also a Fixed-Satellite Service licensee and uses the spectrum covered under its UMFUS license in connection with a satellite earth station, it can demonstrate compliance with the requirements of this section by demonstrating that the earth station in question is in service, operational, and using the spectrum associated with the license. This provision can only be used to demonstrate compliance for the county in which the earth station is located.

(d) Failure to meet this requirement will result in automatic cancellation of the license. In bands licensed on a Partial Economic Area basis, licensees will have the option of partitioning a license on a county basis in order to reduce the population within the license area to a level where the licensee's buildout would meet one of the applicable performance metrics.

(e) Existing 28 GHz and 39 GHz licensees shall be required to make a showing pursuant to this rule by June 1, 2024.

§ 30.106 Geographic partitioning and spectrum disaggregation.

(a) Parties seeking approval for partitioning and disaggregation shall request from the Commission an authorization for partial assignment of a license pursuant to § 1.948 of this chapter. Upper Microwave Flexible Use Service licensees may apply to partition their licensed geographic service area or disaggregate their licensed spectrum at any time following the grant of their licenses.

(b) *Technical standards*—(1) *Partitioning.* In the case of partitioning, applicants and licensees must file FCC Form 603 pursuant to § 1.948 of this chapter and list the partitioned service area on a schedule to the application. The geographic coordinates must be specified in degrees, minutes, and seconds to the nearest second of latitude and longitude and must be based upon the 1983 North American Datum (NAD83).

(2) Spectrum may be disaggregated in any amount.

(3) The Commission will consider requests for partial assignment of licenses that propose combinations of partitioning and disaggregation.

(4) For purposes of partitioning and disaggregation, part 30 systems must be designed so as not to exceed the signal level specified for the particular spectrum block in § 30.204 at the licensee's service area boundary, unless the affected adjacent service area licensees have agreed to a different signal level.

(c) *License term.* The license term for a partitioned license area and for disaggregated spectrum shall be the remainder of the original licensee's license term as provided for in § 30.104.

(d)(1) Parties to partitioning agreements must satisfy the construction requirements set forth in § 30.105 by the partitioner and partitionee each certifying that it will independently meet the construction requirement for its respective partitioned license area. If the partitioner or partitionee fails to meet the construction requirement for its respective partitioned license area, then the relevant partitioned license will automatically cancel.

(2) Parties to disaggregation agreements must satisfy the construction requirements set forth in § 30.105 by the disaggregator and disaggregatee each certifying that it will independently meet the construction requirement for its respective disaggregated license area. If the disaggregator or disaggregatee fails to meet the construction requirement for its respective disaggregated license area, then the relevant disaggregated license will automatically cancel.

§ 30.107 Discontinuance of service.

(a) An Upper Microwave Flexible Use License authorization will automatically terminate, without specific Commission action, if the licensee permanently discontinues service after the initial license term.

(b) For licensees with common carrier regulatory status, permanent discontinuance of service is defined as 180 consecutive days during which a licensee does not provide service to at least one subscriber that is not affiliated with, controlled by, or related to the licensee in the individual license area. For licensees with non-common carrier status, permanent discontinuance of service is defined as 180 consecutive days during which a licensee does not operate.

(c) A licensee that permanently discontinues service as defined in this section must notify the Commission of the discontinuance within 10 days by filing FCC Form 601 or 605 requesting license cancellation. An authorization will automatically terminate, without specific Commission action, if service is permanently discontinued as defined in this section, even if a licensee fails to file the required form requesting license cancellation.

Subpart C—Technical Standards

§ 30.201 Equipment authorization.

(a) Except as provided under paragraph (c) of this section, each transmitter utilized for operation under this part must be of a type that has been authorized by the Commission under its certification procedure.

(b) Any manufacturer of radio transmitting equipment to be used in these services may request equipment authorization following the procedures set forth in subpart J of part 2 of this chapter. Equipment authorization for an individual transmitter may be requested by an applicant for a station authorization by following the procedures set forth in part 2 of this chapter.

(c) Unless specified otherwise, transmitters for use under the provisions of subpart E of this part for fixed point-to-point microwave and point-to-multipoint services must be a type that has been verified for compliance.

§ 30.202 Power limits.

(a) For fixed and base stations operating in connection with mobile systems, the average power of the sum of all antenna elements is limited to a maximum equivalent isotopically radiated power (EIRP) density of +75dBm/100MHz, except as specified in paragraph (e) of this section.

(b) For mobile stations, the average power of the sum of all antenna elements is limited to a maximum EIRP density of +43 dBm/100MHz.

(c) For transportable stations, as defined in § 30.2, the average power of the sum of all antenna elements is limited to a maximum EIRP density of +55 dBm/100MHz.

(d) For fixed point-to-point and point-to-multipoint limits see § 30.405.

(e) Antenna Height Limits

Antenna height (AAT) in meters (feet)	Effective isotropic radiated power density (EIRP) (dBm/100 MHz)
Above 1372 (4500)	62
Above 1220 (4000) To 1372 (4500)	63
Above 1067 (3500) To 1220 (4000)	64
Above 915 (3000) To 1067 (3500)	65
Above 763 (2500) To 915 (3000)	67
Above 610 (2000) To 763 (2500)	69

Antenna height (AAT) in meters (feet)	Effective isotropic radiated power density (EIRP) (dBm/100 MHz)
Above 458 (1500) To 610 (2000)	71
Above 305 (1000) To 458 (1500)	73
Up to 305 (1000)	75

§ 30.203 Emission limits.

(a) The conductive power or the total radiated power of any emission outside a licensee's frequency block shall be −13 dBm/MHz or lower. However, in the bands immediately outside and adjacent to the licensee's frequency block, having a bandwidth equal to 10 percent of the channel bandwidth, the conductive power or the total radiated power of any emission shall be −5 dBm/MHz or lower.

(b)(1) Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater.

(2) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges as the design permits.

(3) The measurements of emission power can be expressed in peak or average values.

(c) For fixed point-to-point and point-to-multipoint limits see § 30.404.

§ 30.204 Field strength limits.

(a) *Base/Mobile Operations.* The predicted or measured Power Flux Density (PFD) from any Base Station operating in the 27.5–28.35 GHz band, 37–38.6 GHz band, and 38.6–40 GHz bands at any location on the geographical border of a licensee's service area shall not exceed −76dBm/m^2/MHz (measured at 1.5 meters above ground) unless the adjacent affected service area licensee(s) agree(s) to a different PFD.

(b) Fixed Point-to-Point Operations:

(1) Prior to operating a fixed point-to-point transmitting facility in the 27,500–28,350 MHz band where the facilities are located within 20 kilometers of the boundary of the licensees authorized market area, the licensee must complete frequency coordination in accordance with the procedures specified in § 101.103(d)(2) of this chapter with respect to neighboring licensees that may be affected by its operations.

(2) Prior to operating a fixed point-to-point transmitting facility in the 37,000–40,000 MHz band where the facilities are located within 16 kilometers of the boundary of the licensees authorized market area, the licensee must complete frequency coordination in accordance with the procedures specified in § 101.103(d)(2) of this chapter with respect to neighboring licensees that may be affected by its operations.

§ 30.205 Federal coordination requirements.

(a) Licensees in the 37–38 GHz band located within the zones defined by the coordinates in the tables below must coordinate their operations with Federal Space Research Service (space to Earth) users of the band via the National Telecommunications and Information Administration (NTIA). All licensees operating within the zone defined by the 60 dBm/100 MHz EIRP coordinates in the tables below must coordinate all operations. Licensees operating within the area between the zones defined by the 60 dBm and 75 dBm/100 MHz EIRP coordinates in the tables below must coordinate all operations if their base station EIRP is greater than 60 dBm/100 MHz or if their antenna height exceeds 100 meters above ground level. Licensees operating outside the zones defined by the 75 dBm/100 MHz EIRP coordinates in the tables below are not required to coordinate their operations with NTIA.

TABLE 1—GOLDSTONE, CALIFORNIA COORDINATION ZONE

60 dBm/100 MHz EIRP		75 dBm/100 MHz EIRP	
Latitude/Longitude (decimal degrees)	Latitude/Longitude (decimal degrees)	Latitude/Longitude (decimal degrees)	Latitude/Longitude (decimal degrees)
34.69217/–115.6491	34.19524/–117.47963	34.69217/–115.6491	34.19524/–117.47963
35.25746/–115.32041	34.24586/–117.36210	35.25746/–115.32041	34.24586/–117.36210
36.21257/–117.06567	35.04648/–117.03781	36.11221/–116.63632	34.21748/–117.12812
36.55967/–117.63691	35.04788/–117.00949	36.54731/–117.48242	34.20370/–116.97024
36.66297/–118.31017	34.22940/–117.22327	36.73049/–118.33683	34.12196/–116.93109
36.06074/–118.38528	34.20370/–116.97024	36.39126/–118.47307	34.09498/–116.75473
35.47015/–118.39008	34.12196/–116.93109	36.36891/–118.47134	34.13603/–116.64002
35.40865/–118.34353	34.09498/–116.75473	35.47015/–118.39008	34.69217/–115.6591
35.35986/–117.24709	34.19642/–116.72901	35.40865/–118.34353	34.69217/–115.6491
35.29539/–117.21102	34.64906/–116.62741	35.32048/–117.26386	
34.67607/–118.55412	34.44404/–116.31486	34.63725/–118.96736	
34.61532/–118.36919	34.52736/–116.27845	34.55789/–118.36204	
34.91551/–117.70371	34.76685/–116.27930	34.51108/–118.15329	
34.81257/–117.65400	34.69217/–115.6591	34.39220/–118.28852	
34.37411/–118.18385	34.69217/–115.6491	34.38546/–118.27460	
34.33405/–117.94189		34.37524/–118.24191	
34.27249/–117.65445		34.37039/–118.22557	

TABLE 2—SOCORRO, NEW MEXICO COORDINATION ZONE

60 dBm/100 MHz EIRP		75 dBm/100 MHz EIRP
Latitude/Longitude (decimal degrees)	Latitude/Longitude (decimal degrees)	Latitude/Longitude (decimal degrees)
34.83816/–107.66828	33.44401/–108.67876	33.10651/–108.19320
34.80070/–107.68759	33.57963/–107.79895	33.11780/–107.99980
34.56506/–107.70233	33.84552/–107.60207	33.13558/–107.85611
34.40826/–107.71489	33.85964/–107.51915	33.80383/–107.16520
34.31013/–107.88349	33.86479/–107.17223	33.94554/–107.15516
34.24067/–107.96059	33.94779/–107.15038	33.95665/–107.15480
34.10278/–108.23166	34.11122/–107.18132	34.08156/–107.18137
34.07442/–108.30646	34.15203/–107.39035	34.10646/–107.18938
34.01447/–108.31694	34.29643/–107.51071	35.24269/–107.67969
33.86740/–108.48706	34.83816/–107.66828	34.06647/–108.70438
33.81660/–108.51052		33.35946/–108.68902
33.67909/–108.58750		33.29430/–108.65004
33.50223/–108.65470		33.10651/–108.19320

TABLE 3—WHITE SANDS, NEW MEXICO COORDINATION ZONE

60 dBm/100 MHz EIRP		75 dBm/100 MHz EIRP	
Latitude/Longitude (decimal degrees)	Latitude/Longitude (decimal degrees)	Latitude/Longitude (decimal degrees)	Latitude/Longitude (decimal degrees)
33.98689/–107.15967	31.78455/–106.54058	31.7494/–106.49132	32.88382/–108.16588
33.91573/–107.46301	32.24710/–106.56114	32.24524/–106.56507	32.76255/–108.05679
33.73122/–107.73585	32.67731/–106.53681	32.67731/–106.53681	32.56863/–108.43999
33.37098/–107.84333	32.89856/–106.56882	32.89856/–106.56882	32.48991/–108.50032
33.25424/–107.86409	33.24323/–106.70094	33.04880/–106.62309	32.39142/–108.48959
33.19808/–107.89673	33.98689/–107.15967	33.21824/–106.68992	31.63664/–108.40480
33.02128/–107.87226		33.24347/–106.70165	31.63466/–108.20921
32.47747/–107.77963		34.00708/–107.08652	31.78374/–108.20798
32.31543/–108.16101		34.04967/–107.17524	31.78322/–106.52825
31.79429/–107.88616		33.83491/–107.85971	31.7494/–106.49132

(b) Licensees in the 37–38.6 GHz band located within the zones defined by the coordinates in the table below must coordinate their operations with the Department of Defense via the National Telecommunications and Information Administration (NTIA).

TABLE—COORDINATION AREAS FOR FEDERAL TERRESTRIAL SYSTEMS

Location	Agency	Coordination area (Decimal Degrees)
China Lake, CA	Navy	30 kilometer radius centered on latitude 35.59527 and longitude −117.22583. 30 kilometer radius centered on latitude 35.52222 and longitude −117.30333. 30 kilometer radius centered on latitude 35.76222 and longitude −117.60055. 30 kilometer radius centered on latitude 35.69111 and longitude −117.66916.
San Diego, CA	Navy	30 kilometer radius centered on latitude 32.68333 and longitude −117.23333.
Nanakuli, HI	Navy	30 kilometer radius centered on latitude 21.38333 and longitude −158.13333.
Fishers Island, NY	Navy	30 kilometer radius centered on latitude 41.25 and longitude −72.01666.
Saint Croix, VI	Navy	30 kilometer radius centered on latitude 17.74722 and longitude −64.88.
Fort Irwin, CA	Army	30 kilometer radius centered on latitude 35.26666 and longitude −116.68333.
Fort Carson, CO	Army	30 kilometer radius centered on latitude 38.71666 and longitude −104.65.
Fort Hood, TX	Army	30 kilometer radius centered on latitude 31.11666 and longitude −97.76666.
Fort Bliss, TX	Army	30 kilometer radius centered on latitude 31.8075 and longitude −106.42166.

TABLE—COORDINATION AREAS FOR FEDERAL TERRESTRIAL SYSTEMS—Continued

Location	Agency	Coordination area (Decimal Degrees)
Yuma Proving Ground, AZ	Army	30 kilometer radius centered on latitude 32.48333 and longitude −114.33333.
Fort Huachuca, AZ	Army	30 kilometer radius centered on latitude 31.55 and longitude −110.35.
White Sands Missile Range, NM	Army	30 kilometer radius centered on latitude 33.35 and longitude −106.3.
Moody Air Force Base, GA	Air Force	30 kilometer radius centered on latitude 30.96694 and longitude −83.185.
Hurlburt Air Force Base, FL	Air Force	30 kilometer radius centered on latitude 30.42388 and longitude −86.70694.

§ 30.206 International coordination.

Operations in the 27.5–28.35 GHz, 37–38.6, and 38.6–40 GHz bands are subject to existing and future international agreements with Canada and Mexico.

§ 30.207 RF safety.

Licensees and manufacturers are subject to the radio frequency radiation exposure requirements specified in §§ 1.1307(b), 1.1310, 2.1091, and 2.1093 of this chapter, as appropriate. Applications for equipment authorization of mobile or portable devices operating under this section must contain a statement confirming compliance with these requirements. Technical information showing the basis for this statement must be submitted to the Commission upon request.

§ 30.208 Operability.

Mobile and transportable stations that operate on any portion of frequencies within the 27.5–28.35 GHz or the 37–40 GHz bands must be capable of operating on all frequencies within those particular bands.

§ 30.209 Duplexing.

Stations authorized under this rule part may employ frequency division duplexing, time division duplexing, or any other duplexing scheme, provided that they comply with the other technical and operational requirements specified in this part.

§ 30.210 Information sharing requirements in the 48.2–50.2 GHz band.

(a) Each operator of a Fixed Service or Mobile Service system in the 48.2–50.2 GHz band will make the technical information about its system listed in paragraphs (b) and (c) of this section available to FSS operators by one or more of the following means:

(1) An online database operated by the Upper Microwave Flexible Use licensee;

(2) An online database operated by a third-party database manager, or

(3) A continuously transmitted pilot signal receivable throughout the terrain within which a FSS facility could cause interference to or receive interference from the terrestrial system.

(b) All licensees deploying fixed systems in the48.2–50.2 GHz bands will make the following information about each such system available to FSS operators in those bands by one or more of the means described in paragraph (a) of this section:

(1) Licensee's name and address.

(2) Transmitting station name.

(3) Transmitting station coordinates.

(4) Frequencies and polarizations.

(5) Transmitting equipment, its stability, effective isotropic radiated power, emission designator, and type of modulation (digital).

(6) Transmitting antenna(s), model, gain, and a radiation pattern provided or certified by the manufacturer.

(7) Transmitting antenna center line height(s) above ground level and ground elevation above mean sea level.

(8) Transmitting antenna boresight(s) angle of elevation with respect to the horizon.

(9) Receiving station name.

(10) Receiving station coordinates.

(11) Receiving antenna(s), model, gain, and, if required, a radiation pattern provided or certified by the manufacturer.

(12) Receiving antenna center line height(s) above ground level and ground elevation above mean sea level.

(13) Receiving antenna boresight(s) angle of elevation with respect to the horizon.

(14) Path azimuth and distance.

(c) All licensees deploying mobile service base stations in the 48.2–50.2 GHz bands will make the following information about each such base station available to FSS operators by one or both of the means described in paragraph (a) of this section:

(1) Licensee's name and address.

(2) Transmitting station name.

(3) Transmitting station coordinates.

(4) Frequencies and polarizations.

(5) Transmitting equipment, its stability, maximum effective isotropic radiated power, emission designator, and types of modulation.

(6) Transmitting antenna(s), model, maximum gain, and maximum extent of all possible radiation patterns provided or certified by the manufacturer.

(7) Transmitting antenna center line height(s) above ground level and ground elevation above mean sea level.

(8) Transmitting antenna boresight(s) maximum and minimum angles of elevation with respect to the horizon.

(9) Transmitting antenna boresight minimum and maximum azimuths, or designation of omnidirectionality.

(10) Boundary of the area served by the base station for purposes of communication with mobile user equipment.

(11) Receiving antenna(s), model, gain, and maximum extent of all possible radiation patterns provided or certified by the manufacturer.

(12) Receiving antenna center line height(s) above ground level and ground elevation above mean sea level.

(13) Receiving antenna boresight maximum and minimum angles of elevation with respect to the horizon.

(14) Receiving antenna boresight minimum and maximum azimuths, or designation of omnidirectionality.

Subpart D—Competitive Bidding Procedures

§ 30.301 Upper microwave flexible use service subject to competitive bidding.

Mutually exclusive initial applications for Upper Microwave Flexible User Service licenses are subject to competitive bidding. The general competitive bidding procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise provided in this subpart.

§ 30.302 Designated entities and bidding credits.

(a) *Eligibility for small business provisions.* (1) A small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, have average gross revenues that are not more than $55 million for the preceding three (3) years.

(2) A very small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than $20 million for the preceding three (3) years.

(b) *Bidding credits.* A winning bidder that qualifies as a small business, as defined in this section, or a consortium of small businesses may use a bidding credit of 15 percent, as specified in § 1.2110(f)(2)(i)(C) of this chapter. A winning bidder that qualifies as a very small business, as defined in this section, or a consortium of very small businesses may use a bidding credit of 25 percent, as specified in § 1.2110(f)(2)(i)(B) of this chapter.

(c) A rural service provider, as defined in § 1.2110(f)(4) of this chapter, who has not claimed a small business bidding credit may use a bidding credit of 15 percent bidding credit, as specified in § 1.2110(f)(4)(i) of this chapter.

Subpart E—Special Provisions for Fixed Point-to-Point, Fixed Point-to-Multipoint Hub Stations, and Fixed Point-to-Multipoint User Stations

§ 30.401 Permissible service.

Stations authorized under this subpart may deploy stations used solely as fixed point-to-point stations, fixed point-to-multipoint hub stations, or fixed point-to-multipoint user stations, as defined in § 30.2 subject to the technical and operational requirements specified in this subpart.

§ 30.402 Frequency tolerance.

The carrier frequency of each transmitter authorized under this subpart must be maintained within the following percentage of the reference frequency (unless otherwise specified in the instrument of station authorization the reference frequency will be deemed to be the assigned frequency):

Frequency (MHz)	Frequency tolerance (percent)
27,500 to 28,350	0.001
38,600 to 40,000	0.03

§ 30.403 Bandwidth.

(a) Stations under this sub-part will be authorized any type of emission, method of modulation, and transmission characteristic, consistent with efficient use of the spectrum and good engineering practice.

(b) The maximum bandwidth authorized per frequency to stations under this subpart is set out in the table that follows.

Frequency band (MHz)	Maximum authorized bandwidth
27,500 to 28,350	850 MHz.
38,600 to 40,000	200 MHz.[1]

[1] For channel block assignments in the 38,600–40,000 MHz bands when adjacent channels are aggregated, equipment is permitted to operate over the full channel block aggregation without restriction.

§ 30.404 Emission limits.

(a) The mean power of emissions must be attenuated below the mean output power of the transmitter in accordance with the following schedule:

(1) When using transmissions other than those employing digital modulation techniques:

(i) On any frequency removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: At least 25 decibels;

(ii) On any frequency removed from the assigned frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: At least 35 decibels;

(iii) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least $43 + 10 \text{ Log}_{10}$ (mean output power in watts) decibels, or 80 decibels, whichever is the lesser attenuation.

(2) When using transmissions employing digital modulation techniques in situations not covered in this section:

(i) In any 1 MHz band, the center frequency of which is removed from the assigned frequency by more than 50 percent up to and including 250 percent of the authorized bandwidth: As specified by the following equation but in no event less than 11 decibels:

$$A = 11 + 0.4(P - 50) + 10 \text{ Log}_{10} B.$$

(Attenuation greater than 56 decibels or to an absolute power of less than -13 dBm/1MHz is not required.)

(ii) In any 1 MHz band, the center frequency of which is removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least $43 + 10 \text{ Log}_{10}$ (the mean output power in watts) decibels, or 80 decibels, whichever is the lesser attenuation. The authorized bandwidth includes the nominal radio frequency bandwidth of an individual transmitter/modulator in block-assigned bands. Equipment licensed prior to April 1, 2005 shall only be required to meet this standard in any 4 kHz band.

(iii) The emission mask in paragraph (a)(2)(i) of this section applies only to the band edge of each block of spectrum, but not to subchannels established by licensees. The value of P in the equation is the percentage removed from the carrier frequency and assumes that the carrier frequency is the center of the actual bandwidth used. The emission mask can be satisfied by locating a carrier of the subchannel sufficiently far from the channel edges so that the emission levels of the mask are satisfied. The emission mask shall use a value B (bandwidth) of 40 MHz, for all cases even in the case where a narrower subchannel is used (for instance the actual bandwidth is 10 MHz) and the mean output power used in the calculation is the sum of the output power of a fully populated channel. For block assigned channels, the out-of-band emission limits apply only outside the assigned band of operation and not within the band.

(b) [Reserved]

§ 30.405 Transmitter power limitations.

On any authorized frequency, the average power delivered to an antenna in this service must be the minimum amount of power necessary to carry out the communications desired. Application of this principle includes, but is not to be limited to, requiring a licensee who replaces one or more of its antennas with larger antennas to reduce its antenna input power by an amount appropriate to compensate for the increased primary lobe gain of the replacement antenna(s). In no event shall the average equivalent isotropically radiated power (EIRP), as referenced to an isotropic radiator, exceed the following:

MAXIMUM ALLOWABLE EIRP

Frequency band (MHz)	Fixed (dBW)
27,500–28,350[1]	+ 55
38,600–40,000	+ 55

[1] For Point-to-multipoint user stations authorized in these bands, the EIRP shall not exceed 55 dBw or 42 dBw/MHz.

§ 30.406 Directional antennas.

(a) Unless otherwise authorized upon specific request by the applicant, each station authorized under the rules of this subpart must employ a directional antenna adjusted with the center of the major lobe of radiation in the horizontal plane directed toward the receiving station with which it communicates; *provided, however,* where a station communicates with more than one point, a multi- or omni-directional antenna may be authorized if necessary.

(b) Fixed stations (other than temporary fixed stations) must employ transmitting and receiving antennas (excluding second receiving antennas for operations such as space diversity) meeting the appropriate performance Standard A indicated below, except that in areas not subject to frequency congestion, antennas meeting performance Standard B may be used. For frequencies with a Standard B1 and a Standard B2, in order to comply with Standard B an antenna must fully meet either Standard B1 or Standard B2. Licensees shall comply with the antenna standards table shown in this paragraph in the following manner:

(1) With either the maximum beamwidth to 3 dB points requirement or with the minimum antenna gain requirement; and

(2) With the minimum radiation suppression to angle requirement.

Frequency (MHz)	Category	Maximum beamwidth to 3 dB points[1] (included angle in degrees)	Minimum antenna gain (dbi)	Minimum radiation suppression to angle in degrees from centerline of main beam in decibels						
				5° to10°	10° to 15°	15° to 20°	20° to 30°	30° to 100°	100° to 140°	140° to 180°
38,600 to 40,000[2].	A	n/a	38	25	29	33	36	42	55	55
	B	n/a	38	20	24	28	32	35	36	36

[1] If a licensee chooses to show compliance using maximum beamwidth to 3 dB points, the beamwidth limit shall apply in both the azimuth and the elevation planes.

[2] Stations authorized to operate in the 38,600–40,000 MHz band may use antennas other than those meeting the Category A standard. However, the Commission may require the use of higher performance antennas where interference problems can be resolved by the use of such antennas.

§ 30.407 Antenna polarization.

In the 27,500–28,350 MHz band, system operators are permitted to use any polarization within its service area, but only vertical and/or horizontal polarization for antennas located within 20 kilometers of the outermost edge of their service area.

Subpart F—Shared operation in the 71–76 GHz and 81/86 GHz bands

§ 30.501 Scope.

(a) This section sets forth the regulations governing use of devices in the 71–76 GHz and 81–86 GHz bands. The operation of all equipment in this band shall be coordinated by one or more authorized Spectrum Access Systems (SASs).

(b) Operations in this band include Priority Access and General Authorized Access tiers of service. Priority Access Licensees and General Authorized Access Users must not cause harmful interference to Incumbent Users and must accept interference from Incumbent Users. General Authorized Access Users must not cause harmful interference to Priority Access Licensees and must accept interference from Priority Access Licensees.

§ 30.502 Authorization required.

(a) Devices must be used and operated consistent with the rules in this subpart.

(b) Authorizations for PALs may be granted upon proper application, provided that the applicant is qualified in regard to citizenship, character, financial, technical and other criteria established by the Commission, and that the public interest, convenience and necessity will be served. See 47 U.S.C. 301, 308, 309, and 310. The holding of an authorization does not create any rights beyond the terms, conditions, and period specified in the authorization and shall be subject to the provisions of the Communications Act of 1934, as amended, and the Commission's rules and policies thereunder.

(c) Grandfathered registered fixed links are authorized to operate consistent with § 101.1529 of this chapter.

§ 30.503 Frequency assignments.

(a) Any frequencies designated for Priority Access that are not in use by a Priority Access Licensee may be utilized by General Authorized Access Users.

(b) An SAS shall assign authorized devices to specific frequencies, which may be reassigned by that SAS, consistent with this part.

§ 30.504 Technical rules.

Devices in these bands shall be subject to the technical rules in subpart C of this part.

§ 30.505 Protection of Federal incumbents.

Prior to commencing operation, all operations in these bands must complete coordination with Federal Government links according to the coordination standards and procedures adopted in Report and Order, FCC 03–248, and as further detailed in subsequent implementation public notices issued consistent with that order.

§ 30.506 Priority Access Licenses.

(a) Applications for Priority Access Licenses must:

(1) Demonstrate the applicant's qualifications to hold an authorization;

(2) State how a grant would serve the public interest, convenience, and necessity;

(3) Contain all information required by FCC rules and application forms;

(4) Propose operation of a facility or facilities in compliance with all applicable rules; and

(5) Be amended as necessary to remain substantially accurate and complete in all significant respects, in accordance with the provisions of § 1.65 of this chapter.

(b) Devices used for Priority Access must register with a Spectrum Access System and comply with its instructions pursuant to § 30.508.

(c) Records pertaining to PALs, including applications and licenses, shall be maintained by the Commission in a publicly accessible system.

§ 30.507 General Access.

(a) Devices used for General Authorized Access must register with the Spectrum Access System and comply with its instructions.

(b) General Authorized Access Users shall be permitted to use frequencies assigned to Priority Access Licenses when such frequencies are not in use, as determined by the Spectrum Access System.

(c) Frequencies that are available for General Authorized Access Use shall be made available on a shared basis.

(d) General Authorized Access Users shall have no expectation of interference protection from other General Authorized Access Users operating in accordance with this part.

(e) General Authorized Access Users must not cause harmful interference to and must accept interference from

Priority Access Licensees and Grandfathered Registered Links in accordance with this part.

§ 30.508 Spectrum access system purposes and functionality.

The Spectrum Access System shall:

(a) Enact and enforce all policies and procedures developed by the SAS Administrator.

(b) Determine and provide to devices the permissible channels or frequencies at their location.

(c) Determine and provide to devices the maximum permissible transmission power level at their location.

(d) Register and authenticate the identification information and location of devices.

(e) Ensure that devices protect Grandfathered Register Links from harmful interference.

(f) Protect Priority Access Licensees from interference caused by other Priority Access Licenses and from General Authorized Access Users.

(g) Resolve conflicting uses of the band while maintaining, as much as possible, a stable radio frequency environment.

(h) Ensure secure and reliable transmission of information between the SAS and devices.

(i) Protect Grandfathered Registered Links consistent with § 101.1529 of this chapter.

(j) Implement the terms of applicable current and future international agreements.

§ 30.509 Registration, authentication, and authorization of devices.

(a) A Spectrum Access System must register, authenticate, and authorize operations of devices consistent with this part.

(b) Devices composed of a network of base and fixed stations may employ a subsystem for aggregating and communicating all required information exchanges between the SAS and devices.

(c) A Spectrum Access System must also verify that the FCC identifier (FCC ID) of any device seeking access to its services is valid prior to authorizing it to begin providing service. A list of devices with valid FCC IDs and the FCC IDs of those devices is to be obtained from the Commission's Equipment Authorization System.

PART 101—FIXED MICROWAVE SERVICES

■ 6. The authority citation for part 101 continues to read as follows:

Authority: 47 U.S.C. 154, 303.

■ 7. Add § 101.1529 to read as follows:

§ 101.529 Grandfathered operation and transition to upper microwave flexible use service.

Links registered with a third party database administrator on or before [insert effective date of rules] that are constructed, in service, and fully compliant with the rules in part 101, subpart Q as of [insert date one year after effective date of rules] will be afforded protection from harmful interference caused by Upper Microwave Flexible Use users until the end of their license term.

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Part V

Bureau of Consumer Financial Protection

12 CFR Parts 1070 and 1091

Amendments Relating to Disclosure of Records and Information; Proposed Rule

BUREAU OF CONSUMER FINANCIAL PROTECTION

12 CFR Parts 1070 and 1091

[Docket No. CFPB–2016–0039]

RIN 3170–AA63

Amendments Relating to Disclosure of Records and Information

AGENCY: Bureau of Consumer Financial Protection.

ACTION: Proposed rule with request for public comment.

SUMMARY: The Bureau of Consumer Financial Protection (Bureau) proposes amendments to the procedures used by the public to obtain information from the Bureau under the Freedom of Information Act, the Privacy Act of 1974, and in legal proceedings. The Bureau also proposes amendments to its rule regarding the confidential treatment of information obtained from persons in connection with the exercise of its authorities under Federal consumer financial law.

DATES: Comments must be received on or before October 24, 2016.

ADDRESSES: You may submit comments, identified by Docket No. CFPB–2016–0039 or RIN 3170–AA63, by any of the following methods:

Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.

- *Email: FederalRegisterComments@cfpb.gov.* Include Docket No. CFPB–2016–0039 and/or RIN 3170–AA63 in the subject line of the email.
- *Mail:* Monica Jackson, Office of the Executive Secretary, Consumer Financial Protection Bureau, 1700 G Street NW., Washington, DC 20552.
- *Hand Delivery/Courier:* Monica Jackson, Office of the Executive Secretary, Consumer Financial Protection Bureau, 1275 First Street NE., Washington, DC 20002.
- *Instructions:* All submissions should include the agency name and docket number or Regulatory Information Number (RIN) for this rulemaking. Because paper mail in the Washington, DC area and at the Bureau is subject to delay, commenters are encouraged to submit comments electronically. In general, all comments received will be posted without change to *http://www.regulations.gov.* In addition, comments will be available for public inspection and copying at 1275 First Street NE., Washington, DC 20002, on official business days between the hours of 10 a.m. and 5 p.m. Eastern Time. You can make an appointment to inspect the documents by telephoning (202) 435–7275. All comments, including attachments and other supporting materials, will become part of the public record and subject to public disclosure. Sensitive personal information, such as account numbers or Social Security numbers, should not be included. Comments generally will not be edited to remove any identifying or contact information.

FOR FURTHER INFORMATION CONTACT: David Snyder, Senior Counsel, Legal Division, 202–435–7758.

SUPPLEMENTARY INFORMATION:

I. Background

On July 21, 2010, the President signed into law the Dodd–Frank Wall Street Reform and Consumer Protection Act (Pub. L. 111–203, codified at 12 U.S.C. 5301 *et seq.*) (Dodd-Frank Act). Title X of the Dodd-Frank Act created the Bureau. Pursuant to the provisions of the Dodd-Frank Act, the Bureau began to exercise its authority to regulate the offering and provision of consumer financial products and services under Federal consumer financial law on July 21, 2011.[1]

In order to establish safeguards for protecting the confidentiality of information, as well as procedures for disclosing information as appropriate, the Bureau published an interim final rule on July 28, 2011, 76 FR 45371 (Jul. 28, 2011), followed by a final rule on February 15, 2013, 78 FR 11483 (Feb. 15, 2013). The Bureau now proposes to amend the rule to clarify, correct, and amend certain provisions based on its experience over the last several years. The Bureau solicits comments on all aspects of its proposal.

II. Summary of the Proposed Rule

The Bureau proposes revising all five subparts of part 1070. It seeks comment on all aspects of its proposed rule.

Subpart A of the rule consists largely of definitions of terms that are used throughout the remainder of the part. The Bureau proposes revising several of these definitions to clarify their intended meanings as well as Bureau practices.

Subpart B of the rule implements the Freedom of Information Act, 5 U.S.C. 552 (the FOIA). The Bureau proposes revising this subpart to clarify its practices, provide additional flexibility for requesters, and reflect recent changes made to the FOIA by the FOIA Improvement Act of 2016 (Pub. L. 114–185). Additionally, these changes streamline the Bureau's process for assessing FOIA fees and notifying requesters of such fees. These changes will allow the Bureau to process FOIA requests more efficiently and provide records to requesters more quickly.

Subpart C of the rule (sometimes referred to as *Touhy* regulations) sets forth procedures for requests for information from the Bureau in connection with legal proceedings between others, and describes the Bureau's procedures for considering such requests or demands for official information. The Bureau proposes organizational and clarifying revisions to the provisions currently set forth in this subpart.

Subpart D of the rule pertains to the protection and disclosure of confidential information that the Bureau generates and receives during the course of its work. Various provisions of the Dodd-Frank Act require the Bureau to promulgate regulations providing for the confidentiality of certain types of information and protecting such information from public disclosure. The Bureau has sought to provide the maximum protection for confidential information, while ensuring its ability to share or disclose information to the extent necessary to achieve its mission. The Bureau has included detailed procedures in its rule in order to promote transparency regarding its practices and anticipated uses of confidential information.

The Bureau has sought to balance concerns regarding the need to protect confidential information, including sensitive personal information, business information, and confidential supervisory information, against the need to use and disclose certain information in the course of its work or, as appropriate, the work of other agencies with overlapping statutory or regulatory authority. The Bureau proposes amending subpart D to clarify, correct, and amend certain aspects of the rule based on its experience over the last several years.

In addition, in amending this subpart, the Bureau intends to codify its revised interpretation of 12 U.S.C. 5512(c)(6). The Bureau has previously interpreted 12 U.S.C. 5512(c)(6)(C)(ii), which discusses discretionary disclosure of confidential supervisory information to certain agencies with "jurisdiction," to set forth a positive grant of authority that limits the Bureau's discretion to disclose confidential supervisory information under the rules authorized by 12 U.S.C. 5512(c)(6)(A). The Bureau now believes that the better interpretation of 12 U.S.C.

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[1] Pursuant to section 1062 of the Dodd-Frank Act, 12 U.S.C. 5582, the Secretary of the Treasury designated July 21, 2011 as the "transfer date" on which various provisions of Title X of the Dodd-Frank Act became effective. 75 FR 57252.

5512(c)(6)(C)(ii), when read in context with 12 U.S.C. 5512(c)(6)(B) and 12 U.S.C. 5512(c)(6)(C)(i), is that it establishes part of an information-sharing regime with a limited set of other agencies. Aside from mandatory disclosure requirements in 12 U.S.C. 5512(c)(6)(C)(i), the regime does not limit the Bureau's discretion to draft rules related to the disclosure of confidential supervisory information. The Bureau proposes accounting for its revised interpretation in 12 CFR 1070.43(b)(1), which addresses the Bureau's discretionary disclosure of confidential information to other agencies. The Bureau's revised interpretation and proposed revision to § 1070.43 do not alter the Bureau's policy on disclosing confidential supervisory information to law enforcement agencies, as previously articulated in CFPB Bulletin 12–01 (Jan. 4, 2012).

Subpart E contains the Bureau's rule implementing the Privacy Act of 1974, 5 U.S.C. 552a. The Bureau proposes revising the subpart to clarify the Chief Privacy Officer's authority, to provide additional flexibility for requestors, and to make technical corrections.

III. Legal Authority

The Bureau is proposing this rule pursuant to its authority under the following statutory provisions: (1) Title X of the Dodd-Frank Act, 12 U.S.C. 5481 *et seq.*, including (a) Section 1022(b)(1), 12 U.S.C. 5512(b)(1), which allows the Bureau to "prescribe rules . . . as may be necessary and appropriate to enable the Bureau to administer and carry out the purposes and objectives of the Federal consumer financial laws"; (b) Section 1022(c)(6)(A), 12 U.S.C. 5512(c)(6)(A), which states that the Bureau "shall prescribe rules regarding the confidential treatment of information obtained from persons in connection with the exercise of its authorities under Federal consumer financial law"; and (c) Section 1052(d), 12 U.S.C. 5562(d), which instructs that "[d]ocumentary materials and tangible things received as a result of a civil investigative demand shall be subject to requirements and procedures regarding confidentiality, in accordance with rules established by the Bureau," and addresses the disclosure of confidential information to Congress; (2) the Freedom of Information Act, 5 U.S.C. 552, which grants the public an enforceable right to obtain access to or copies of federal agency records unless disclosure of those records, or information contained within them, is exempt from disclosure due to one or more statutory exemptions and exclusions; (3) the Privacy Act of 1974, 5 U.S.C. 552a, which provides individuals with certain privacy protections related to federal agencies' collection, maintenance, use, and disclosure of information about them; (4) the Right to Financial Privacy Act, 12 U.S.C. 3401 *et seq.*, which provides individuals with certain privacy protections related to the disclosure of financial records by financial institutions to federal agencies; (5) the Trade Secrets Act, 18 U.S.C. 1905, which provides certain protections related to proprietary information disclosed to federal agencies; (6) 18 U.S.C. 641, which prohibits the embezzlement, theft, purloining, knowing conversion, or unauthorized sale, conveyance, or disposal of a federal agency's record, voucher, money, or thing of value; (7) the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, which generally addresses information collections by federal agencies; and (8) the Federal Records Act, 44 U.S.C. 3101, which addresses the creation, maintenance, use, and disposition of federal records by federal agencies;

IV. Section-by-Section Analysis of the Proposed Rule

Part 1070—Disclosure of Records and Information

Subpart A—General Provisions and Definitions

Section 1070.2 General Definitions

Section 1070.2(a) Agency

The Bureau proposes adding a new definition, "agency," which it will define to include "a Federal, State, or foreign governmental authority or an entity exercising governmental authority." As currently drafted, § 1070.43 provides the Bureau with discretion to share confidential information with Federal or State agencies in certain circumstances. The proposed definition, combined with proposed revisions to §§ 1070.43 and 1070.45, will clarify the Bureau's ability to share confidential information with foreign regulators and certain entities that exercise governmental authority, such as registration and disciplinary organizations like state bar associations, and the procedures that should be used to do so. The Bureau may at times collaborate with such entities in the course of carrying out its authorities under Federal consumer financial laws. Proposed revisions to § 1070.47 would expand protections for confidential information disclosed under subpart D to include information shared with these additional entities. The Bureau proposes additional technical corrections throughout the rule to account for use of this new term.[2]

Section 1070.2(b) Associate Director for Supervision, Enforcement and Fair Lending

The Bureau proposes adding a new definition for "Associate Director for Supervision, Enforcement and Fair Lending" in order to clarify the meaning of a term used in the current rule, as well as several times in the proposed revisions to the rule.

Section 1070.2(e) Civil Investigative Demand Material

Section 1070.2(e) defines the term "civil investigative demand material." For purposes of clarity and efficiency, the Bureau proposes incorporating this definition into the definition of "confidential investigative information" in § 1070.2(j). Because the term "civil investigative demand material" only arises in the rule in § 1070.2(j), the separate definition is unnecessary.

Section 1070.2(g) Confidential Information

Section 1070.2(g) defines the term "confidential information." Confidential information refers to three defined categories of non-public information—confidential consumer complaint information, confidential investigative information, and confidential supervisory information—as well as other Bureau information that is exempt from disclosure pursuant to one or more of the statutory exemptions to the FOIA.

Confidential information does not include information contained in records that have been made publicly available or otherwise publicly disclosed by the Bureau. The Bureau proposes revising the definition to clarify that such appropriate disclosures may be made by either Bureau employees or other authorized agents of the Bureau. An unauthorized disclosure of information would not affect the information's confidentiality.

In addition, the Bureau proposes revising the definition to clarify that confidential information disclosed to a third party in accordance with subpart D shall remain the Bureau's confidential information.

Section 1070.2(h) Confidential Consumer Complaint Information

Section 1070.2(h) defines the term "confidential consumer complaint information." The Bureau proposes expanding the definition to include any information received or generated by the Bureau through processes or procedures established under 12 U.S.C. 5493(b)(3). The Bureau has found that its Consumer Response system at times receives misdirected complaints for which it lacks authority to act, or complaints filed by companies rather than consumers. This revision will clarify that any complaints submitted to the Bureau through its Consumer Response system, and any information generated therein, are similarly classified under its confidentiality rules and subject to the same confidentiality protections. The revision does not alter the current text which limits confidential consumer complaint information to only include information that is exempt from disclosure pursuant to 5 U.S.C. 552(b).

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[2] The Bureau also proposes renumbering the definitions in § 1070.2 to account for the addition and subtraction of various definitions.

Section 1070.2(i) Confidential Investigative Information

Section 1070.2(i) defines the term "confidential investigative information." As discussed above with respect to § 1070.2(e), the Bureau proposes incorporating the definition of "civil investigative demand material" into § 1070.2(i). In addition, we propose revising the term to clarify that confidential investigative information includes any information obtained or generated in the course of Bureau enforcement activities, including general investigative activities that may not pertain to a specific institution. The Bureau also proposes replacing § 1070.2(i)(2)'s reference to "materials" with "documents, materials, or records" in order to parallel similar language in the definition of "confidential supervisory information" at § 1070.2(j)(2).

Section 1070.2(j) Confidential Supervisory Information

Section 1070.2(j) defines the term "confidential supervisory information." The Bureau proposes revising § 1070.2(j)(1)(i) to clarify that the term includes supervisory letters and similar documents. Since adopting the current definition of "confidential supervisory information," the Bureau has refined the formats it uses for summarizing and memorializing the results of an examination or other supervisory review of a supervised financial institution. The Bureau currently issues different types of documents, including examination reports and supervisory letters, to convey the results of its examinations and other supervisory reviews. These documents are the property of the Bureau and are provided to the supervised financial institution for its confidential use only.

In addition, the Bureau proposes revising § 1070.2(j)(1)(ii) to state that, in addition to "documents" prepared by, or on behalf of, or for the use of the Bureau or any other Federal, State, or foreign government agency in the exercise of its supervisory authority over a financial institution, confidential supervisory information also includes "materials[] or records" prepared by, or on behalf of, or for the use of the Bureau or any other Federal, State, or foreign government agency in the exercise of its supervisory authority over a financial institution. This revision is intended to clarify that any such physical materials can include confidential supervisory information, regardless of the format. Likewise, the Bureau proposes revising the definition to include information derived from such "materials[] or records." We note that information "derived" from such documents, materials, or records could include either physical materials (such as other documents, materials, or records) or information known to individuals (such as oral testimony or interviews based on knowledge gleaned from the documents, materials, or records).

In addition, the Bureau proposes revising § 1070.2(j)(1)(iv) to delete the reference to information collected using the Bureau's authority to monitor for risks to consumers in the offering or provision of consumer financial products or services under 12 U.S.C. 5512(c)(4) (sometimes referred to as the Bureau's "market monitoring" authority). The Bureau believes that it is not necessary to classify such information as "confidential supervisory information" if it is not used for supervisory purposes. In accordance with the definition of "confidential information" in § 1070.2(g), market monitoring information will continue to be classified and protected as "confidential information" to the extent that it is exempt from disclosure pursuant to one or more of the statutory exemptions to the FOIA. For example, market monitoring information that contains confidential business information or personal information would generally be classified as confidential information because that information generally is exempt from disclosure under the FOIA exemptions (b)(4) or (b)(6), respectively. *See* 5 U.S.C. 552(b)(4) & (6). Such information would be subject to the same protections currently accorded to it, including the limitations on public disclosure and disclosures to other regulators.

In contrast, information collected for market monitoring purposes that is already publicly available generally would not be classified as confidential information because such information generally would not be exempt from disclosure under the FOIA. Under the proposed revision, the Bureau would have more flexibility to use and disclose less-sensitive, non-confidential information as appropriate.

The Bureau proposes replacing the "market monitoring" reference in § 1070.2(j)(1)(iv) with new language stating that confidential supervisory information includes information obtained by the Bureau "for purposes of detecting and assessing risks to consumers and to markets for consumer financial products or services pursuant to 12 U.S.C. 5514(b)(1)(C), 5515(b)(1)(C), and 5516(b)." The purpose of this revision is to clarify that confidential supervisory information continues to include information obtained by the Bureau under its supervisory authorities at 12 U.S.C. 5514(b)(1)(C), 5515(b)(1)(C), and 5516(b). The Bureau has previously interpreted § 1070.2(j)(1)(iv) to address information obtained using these authorities as well as information obtained using its market monitoring authority. The revision is intended to retain the former, but exclude the latter.

Finally, the Bureau proposes deleting § 1070.2(j)(2), which currently states that confidential information does not include documents prepared by a supervised financial institution for its own business purposes and that the Bureau does not possess. This provision was intended to prevent any implication that a supervised financial institution's copies of internal documents would be deemed to be confidential supervisory information on the grounds that those documents had been submitted to the Bureau in the course of a Bureau supervisory process. However, the Bureau believes that this interpretation already follows from the other provisions of the rule, including the definition of "confidential supervisory information," and therefore this exception is unnecessary. Should a supervised financial institution submit copies of such documents to the Bureau in the course of a Bureau supervisory process, the copies of the documents in the Bureau's possession would be Bureau confidential supervisory information. However, submission of those documents to the Bureau does not convert the copies of those documents that are in the possession of the financial institution into Bureau confidential information. The Bureau proposes renumbering § 1070.2(j) in light of this revision.

Section 1070.2(l) Employee

Section 1070.2(l) defines the term "employee". The Bureau proposes revising the definition to clarify that, for purposes of this rule, Bureau "employees" include certain contract personnel and employees of the Bureau's Inspector General.

Section 1070.3 Custodian of Records; Certification; Alternative Authority

Section 1070.3(b) Certification of Record

Section 1070.3(b) authorizes the Bureau's Chief Operating Officer to certify the authenticity of any Bureau record or any copy of such record. The Bureau proposes revising the rule to clarify that the Chief Operating Officer can also certify the absence of a record. Such certification is contemplated in Rule 44 of the Federal Rules of Civil Procedure and Rule 902 of the Federal Rules of Evidence. *See also* Federal Rule of Evidence 803(10).

Section 1070.5 Service of Summonses and Complaints

Currently, § 1070.31 provides the process for serving the Bureau with summonses or complaints. The Bureau proposes moving the provision to a new section in subpart A for clarity in order to separate the rule governing service when the Bureau is a party from the remaining provisions in subpart C, which deal with requests for information for other proceedings. In addition, the Bureau proposes revising paragraph (d)'s requirement that documents be "stamped" "Service Accepted for Official Capacity Only" by replacing the word "stamped" with the word "marked." This proposal would clarify that the documents may be labeled using a variety of methods.

Subpart B—Freedom of Information Act

Section 1070.11 Information Made Available; Discretionary Disclosures

Section 1070.11(a) In General

Section 1070.11(a)(2)

The Bureau proposes to remove the phrase "and copying" and replace it with "in an electronic format." The Bureau proposes similar revisions to section 1070.13. These changes are required by the FOIA Improvement Act of 2016.

Section 1070.14 Requests for CFPB Records

Section 1070.14(b) Form of Request

Section 1070.14(b) specifies the form of FOIA requests. The current text distinguishes between requests made in writing and by electronic means. The Bureau proposes a technical change to this provision. It proposes to remove the phrase "or by electronic means" and add "as follows:" in its place. The Bureau also proposes changes to sections 1070.14(b)(1) and (2) to clarify how requesters must submit FOIA requests to the Bureau. The Bureau proposes similar changes to the following sections: 1070.17(b)(1); 1070.21(c); and 1070.22(e)(1)(i).

Section 1070.14(c) Content of Request

Section 1070.14(c)(4)

Section 1070.14(c)(4) provides that a FOIA requester should indicate in the request whether the requester is a commercial user, an educational institution, non-commercial scientific institution, representative of the news media, governmental entity, or "other" requester, as those terms are defined in § 1070.22(b). The section also informs requesters that they may contact the Bureau's FOIA Public Liaison to seek assistance in determining the appropriate fee category. The current language only permits the Bureau to use information provided to the FOIA Public Liaison by a requester for the purpose of determining the requester's fee category. The Bureau proposes to remove this limitation so that it can use this information for other purposes, such as aiding a requester in clarifying the scope of a request, assisting in identifying records sought by a requester, and helping to resolve disputes related to a request.

Section 1070.14(c)(5)

Section 1070.14(c)(5) provides that if a requester seeks a waiver or reduction of fees associated with processing a request, then the request shall include a statement to that effect. The current language also includes a statement that any request that does not seek a waiver or reduction of fees constitutes an agreement of the requester to pay all fees up to $25. The Bureau proposes to remove this language in light of other proposed fee related revisions. Under the Bureau's proposed revisions to § 1070.22(d) and (f), FOIA requesters may still specify an upper limit on the fees that they are willing to pay to process a request and the Bureau will notify a requester of any potential fees beyond that limit before processing the request.

Section 1070.18 Responses To Requests for CFPB Records

Section 1070.18(a) Acknowledgement of Requests

Section 1070.18(a)(4)

Section 1070.18(a)(4) specifies what fee related information the Bureau will include in acknowledgement letters it sends to requesters. The Bureau proposes to make a technical change to this provision, removing the phrase "(of not less than $25)" to account for the proposed revisions to fee-related provisions in § 1070.22(d) and (f).

Section 1070.18(b) Initial Determination To Grant or Deny a Request

Section 1070.18(b)(4)

The Bureau proposes to add a new provision at section 1070.18(b)(4)(iv) requiring it to inform requesters of the right to seek dispute resolution services from the Bureau's FOIA Public Liaison or the Office of Government Information Services. The Bureau also proposes to renumber the existing provisions under section 1070.18(b)(4) to accommodate this change. This change is required by the FOIA Improvement Act of 2016.

Section 1070.18(c) Resolution of Disputes

The Bureau proposes a new paragraph to inform requesters about the resources available to resolve any disputes that may arise during the request process. These resources are the Bureau's FOIA Public Liaison and mediation services provided by the National Archives and Records Administration (NARA), Office of Government Information Services (OGIS).

Section 1070.18(d) Format of Records Disclosed

The Bureau proposes a new paragraph to inform requesters that they may request records in a particular format. The Bureau will provide records in a requested format when the requested format can readily be reproduced from the original file.

Section 1070.20 Requests for Business Information Provided to the CFPB

Section 1070.20(f) Opportunity To Object to Disclosure

Section 1070.20(f) provides a submitter of business information with ten business days to object to the Bureau's disclosure of the submitter's business information. The Bureau proposes to make two technical changes to this provision clarifying that the Bureau will delay any release of information to afford the submitter ten business days to object to the disclosure.

Section 1070.21 Administrative Appeals

Section 1070.21(b) Time Limits for Filing Administrative Appeals

Section 1070.21(b) provides the time limits for filing administrative appeals. The Bureau proposes to revise this provision to clarify that the time period for filing an appeal begins on the day after the date the initial determination is sent to the requester or the date of the letter transmitting the last records released, whichever is later. The Bureau also proposes to change the time limit for filing an administrative appeal from 45 days to 90 days. This change is required by the FOIA Improvement Act of 2016.

Section 1070.21(d) Processing of Administrative Appeals

Section 1070.21(d) specifies how the Bureau will process administrative appeals. The Bureau proposes to remove the requirement that appeals be stamped with the date of their receipt by the FOIA Office. The FOIA Office does not stamp an appeal with the date the Bureau received it, but the date is recorded in Bureau's system for tracking FOIA requests. This requirement is outmoded and the Bureau proposes to remove it to account for its current practice.

Section 1070.21(d) also currently provides that appeals will be processed in the order in which they are received. Since adopting this provision in 2011, the Bureau has found that it is not always practicable to complete action on appeals in the order in which they are received, and sometimes has chosen to act on a simple later-received appeal rather than delay action pending completion of a more complex earlier-received appeal. In order to better align the regulation with current practice, the Bureau is proposing to delete the provision calling for first-in-first-out processing of appeals.

Section 1070.21(e) Determinations To Grant or Deny Administrative Appeals

Section 1070.21(e) authorizes the General Counsel to decide administrative appeals, and § 1070.21(e)(3) currently allows for remand of a FOIA determination as one option for the General Counsel's disposition of an appeal. The Bureau proposes to amend the first sentence of § 1070.21(e) to add a reference to remands so that all options for disposition of appeals are listed in that sentence.

Section 1070.22 Fees for Processing Requests for CFPB Records

Section 1070.22(b) Categories of Requesters

Section 1070.22(b)(1)

Section 1070.22(b)(1)(i) defines the "Commercial user" category of requester. The Bureau proposes to amend this provision to clarify that the Bureau's decision to place a requester in the commercial user category will be made on a case-by-case basis based on how the requester will use the information. The Bureau proposes this change to clarify how it will make decisions whether to place a requester in the commercial user category.

Section 1070.22(b)(2)

Section 1070.22(b)(2) provides that the Bureau will notify a requester of its determination as to the proper fee category to apply to the requester. The current language of the provision provides that the Bureau will make its determination based on a review of the requester's submission and the Bureau's own records. The Bureau proposes to delete this limitation to clarify that it may base its determination on other appropriate information, including phone conversations with the requester and publicly available information.

Section 1070.22(d) Other Circumstances When Fees Are Not Charged

Section 1070.22(d)(2)

The Bureau proposes to insert a new paragraph at § 1070.22(d)(2); existing paragraphs in § 1070.22(d) will be renumbered to accommodate the new paragraph. Section 1070.22(d) provides certain circumstances where the Bureau may not charge a requester a fee for processing a FOIA request. The proposed new paragraph would provide that the Bureau will not charge a requester any fees when the fee, excluding duplication costs, is less than $250. The Bureau proposes this change as part of its larger goal of revising the process for how it assesses FOIA processing fees and how the Bureau notifies requesters of such fees. This new provision would streamline the Bureau's process for assessing FOIA fees. This change would allow the Bureau to process FOIA requests more quickly and efficiently because the Bureau will no longer need to contact a FOIA requester concerning processing fees when the cost to process the request is less than $250. As such, this provision would provide information to these requesters more quickly and at a reduced cost to the requesters.

Section 1070.22(d)(4)

The Bureau proposes to revise this provision to prohibit it from charging search fees, or in certain cases duplication fees, when the Bureau has failed to comply with time limits under § 1070.15 or § 1070.21, unless (1) unusual circumstances apply to the processing of the request; (2) the Bureau has provided timely written notice of the unusual circumstances to the requester; (3) more than 5,000 pages are necessary to respond to the request; and (4) the Bureau has discussed with the requester (or made three good-faith attempts to do so) how the requester could effectively limit the scope of the request. These changes are required by the FOIA Improvement Act of 2016.

Section 1070.22(e) Waiver or Reduction of Fees

Section 1070.22(e)(5)

Section 1070.22(e)(5) provides that the Bureau will decide whether to grant or deny a request to reduce or waive fees prior to processing the FOIA request and that the Bureau will notify the requester of such a determination in writing. The Bureau proposes to delete this requirement because it is unnecessary in light of other proposed fee related revisions. In many cases involving requests for fee waivers, the Bureau will be able to process the FOIA request without deciding the merits of the fee waiver request because the processing fees will be less than $250. Furthermore, removing this requirement will allow the Bureau to process FOIA requests more efficiently and provide information to requesters more quickly. Under the Bureau's proposed revisions, the Bureau will notify a requester when it has denied a fee waiver request and processing the request would incur fees.

Section 1070.22(e)(6)

Section 1070.22(e)(6) specifies what information the Bureau will include in the letter it sends notifying the requester that the Bureau has denied a request for a waiver or reduction of fees. The Bureau proposes to make a technical change to this provision, removing the phrase "(of not less than $25)" to account for other newly proposed fee related provisions.

Section 1070.22(f) Advance Notice and Prepayment of Fees

Section 1070.22(f) describes the Bureau's process for notifying a requester of any processing fees associated with a FOIA request. The Bureau proposes several changes to this provision to clarify and streamline its process for assessing FOIA processing fees and for notifying requesters of such fees. First, the Bureau proposes to revise § 1070.22(f)(1) to provide that the Bureau will notify a requester of the estimated fees to process a FOIA request when the estimated fees are $250 or more and the estimated fees exceed the limit set by the requester, the requester has not specified a limit, or the Bureau has denied a request for a reduction or waiver of fees. Next, the Bureau proposes to revise § 1070.22(f)(2) to raise the fee threshold above which a requester must pre-pay estimated processing fees from $250 to $1000. This change is necessary because of the Bureau's proposed change to § 1070.22(d): The Bureau proposes raising its current pre-payment threshold of $250 because it will no longer charge fees for processing a request when the fees are $250 or less. The Bureau's proposed revisions to § 1070.22(f) will require a requester to agree to pay processing fees before the Bureau begins processing the request. The Bureau believes that such an agreement will provide sufficient assurance of payment for fees less than $1000. This change is in accordance with the Bureau's current practice for requiring pre-payment of fees. Furthermore, this change will allow the Bureau to process FOIA requests more efficiently and provide records to requesters more quickly.

Section 1070.23 Authority and Responsibilities of the Chief FOIA Officer

Section 1070.22(a) Chief FOIA Officer

Paragraph 1070.22(a) discusses the role of the Bureau's Chief FOIA Officer. The Bureau proposes insert two new subparagraphs to this paragraph. The first concerns the Chief FOIA Officer's responsibility to offer training to Bureau staff regarding their responsibilities under the FOIA and the second concerns the Chief FOIA Officer's role as the primary Bureau liaison with the Office of Government Information Services and the Department of Justice's Office of Information Policy. The Bureau also proposes to renumber the provisions in this section to accommodate these changes. These changes are required by the FOIA Improvement Act of 2016.

Subpart C—Disclosure of CFPB Information in Connection With Legal Proceedings

Subpart C addresses the disclosure of Bureau information in connection with legal proceedings. The Bureau proposes several technical corrections throughout the subpart.

Section 1070.30 Purpose and Scope; Definitions

Section 1070.30(a)

Section 1070.30(a) defines the circumstances for which the procedures outlined in subpart C apply. The Bureau proposes to delete paragraph (a)(1) from this provision and to renumber the section accordingly. The Bureau proposes this revision as a technical change to account for moving § 1070.31 to subpart A.

Section 1070.30(e)

Section 1070.30(e)(2)

Section 1070.30(e)(2) defines the term "legal proceeding" for subpart C. The Bureau proposes to add the phrase "their agents" to the last sentence of this provision to clarify that this definition applies to formal and informal requests made by both attorneys and their agents.

Section 1070.31 Service of Summonses and Complaints

Section 1070.31 provides the process for serving the Bureau with summonses or complaints. As discussed above, the Bureau proposes to delete § 1070.31 from subpart C and move it to a new section in subpart A, § 1070.5. The Bureau also proposes to renumber sections and cross-references in subpart C to account for this change. For additional information, see the discussion of § 1070.5.

Section 1070.31 Service of Subpoenas, Court Orders, and Other Demands for CFPB Information or Action

Section 1070.31(d)

Section 1070.31(d) provides that the Bureau is not authorized to accept on behalf of its employees any subpoenas, orders, or other demands or requests, which are not related to the employees' official duties. In addition, the current text of the provision implies that it is the Bureau's practice to accept such demands or requests "upon the express, written authorization of the individual CFPB employee to whom such demand or request is directed." The Bureau proposes to delete this part of the provision because it is not the general practice of the Bureau to accept service on behalf of individual employees. The Bureau further proposes deleting the paragraph's introductory caveat, "[e]xcept as otherwise provided in this subpart," because the subpart does not otherwise provide for the Bureau to act as an agent for service for subpoenas, orders, or other demands or requests that do not relate to employees' official conduct.

Section 1070.33 Procedure When Testimony or Production of Documents is Sought; General

Section 1070.33(b)

Section 1070.33(b) provides that the General Counsel may require a party seeking official information through testimony, CFPB records, or other material, to describe all reasonably foreseeable demands for such information. The Bureau proposes to make several technical changes to clarify this provision.

Subpart D—Confidential Information

Section 1070.41 Non-Disclosure of Confidential Information

Section 1070.41(b) Disclosures to Contractors and Consultants

Section 1070.41(b) provides that contractors and consultants in possession of confidential information must treat it in accordance with these rules, Federal laws and regulations that apply to Federal agencies for the protection of the confidentiality of personally identifiable information and for data security and integrity, as well as any additional conditions or limitations that the Bureau may impose. The current language includes a requirement that contractors and consultants certify in writing that they will follow this provision. The Bureau proposes replacing the certification requirement with an affirmative statement that contractors and consultants must follow this provision. The revision is intended to clarify that contractors and consultants are subject to § 1070.41(b)'s requirements irrespective of any affirmative certification. We note that this revision will in no way alter the Bureau's current practices related to requiring contractors and consultants to sign non-disclosure agreements, agree to protections in contracts, or take other appropriate steps to protect confidential information.

Section 1070.41(c) Disclosures of Materials Derived From Confidential Information

Section 1070.41(c) addresses the disclosure of materials derived from confidential information. It requires that, when the Bureau discloses such materials, they may not directly or indirectly identify any particular person to whom the confidential information pertains. The Bureau proposes replacing the phrase "[n]othing in this subpart shall limit the discretion of the CFPB" with "[t]he CFPB may . . ." in order to clarify that § 1070.41(c) authorizes such disclosure by the Bureau.

Section 1070.41(d) Disclosures of Confidential Information With Consent

The Bureau proposes a new paragraph that, where practicable, authorizes the Bureau to, upon receipt of prior consent, disclose confidential information that directly or indirectly identifies particular persons. The provision would require consent from all such persons to the extent that the identification constitutes confidential information, and any such disclosure would have to comply with applicable law. The Bureau believes that it may at times be useful to disclose such information in order to achieve its mission objectives. By conditioning disclosure on consent, affected persons' interests would be appropriately protected. This new provision is intended to serve as a distinct authority for disclosure, and it in no way impacts other methods of disclosure currently addressed in the Rule, such as in § 1070.43. The Bureau proposes renumbering the section to account for the new paragraph.

Section 1070.41(e) Nondisclosure of Confidential Information Provided to the CFPB by Other Agencies

Section 1070.41(e) provides that nothing in subpart D requires or authorizes the Bureau to disclose confidential information that it has received from other agencies where such disclosure would contravene applicable law or conflict with any agreement between the CFPB and the provider agency. The Bureau proposes replacing the word "disclosability" in the paragraph's title with "nondisclosure" in order to clarify that this provision protects the confidentiality of other agencies' confidential information. This revision would not make any substantive change to the provision.

Section 1070.42 Disclosure of Confidential Supervisory Information and Confidential Investigative Information to and by Financial Institutions and Their Affiliates

Section 1070.42 provides that the Bureau may, in its discretion, disclose confidential supervisory information concerning a supervised financial institution or its service providers to that supervised financial institution or its affiliates. In addition, § 1070.42 provides that, unless directed otherwise by the Bureau's Associate Director for Supervision, Enforcement, and Fair Lending or by his or her delegee, any supervised financial institution in possession of confidential supervisory information pursuant to this section may further disclose the information to certain recipients and subject to certain conditions.

The Bureau proposes expanding the scope of § 1070.42 to address its enforcement activities in addition to its supervisory activities. This revision will lend clarity to the Bureau's disclosures in the enforcement context, and to the extent of financial institutions' discretion to further disclose confidential investigative information (such as civil investigative demands ("CIDs") or notice and opportunity to respond and advise ("NORA") letters). The resulting rule will provide that recipients of confidential investigative information have the same discretion with respect to disclosing confidential investigative information that they currently have with respect to confidential supervisory information. In addition, the proposal will establish a single process for such recipients to follow if they wish to further disclose confidential information obtained in the course of the Bureau's supervisory or enforcement activities. The proposed revisions will result in no substantive change to the Bureau's supervisory activities or supervised financial institutions' discretion to disclose confidential supervisory information, as currently articulated in the rule.

To achieve these ends, the Bureau proposes revising the section's title to read "Disclosure of confidential supervisory information and confidential investigative information." In addition, all references in the section to "confidential supervisory information" will be accompanied by the phrase "or confidential investigative information." Furthermore, references to any "supervised financial institution" will be replaced by a broader reference to any "person." "Supervised financial institutions" are a kind of "person," which is defined at § 1070.2. The Bureau proposes using this broader term because the recipients of confidential investigative information may not be supervised financial institutions, and at times some recipients, such as third-party recipients of civil investigative demands, may not be financial institutions. Finally, the Bureau proposes several non-substantive technical revisions for purposes of clarity.

The Bureau also proposes revising § 1070.42(a) to provide that, in addition to disclosing information concerning a person, its affiliates, or its service providers to that person or its affiliates, the Bureau may also disclose such information to its service providers. The Bureau proposes this change because such information may at times be relevant to supervision or enforcement activities related to service providers.

In addition, the Bureau proposes revising § 1070.42(b)(2) to clarify that a person in possession of confidential supervisory information or confidential investigative information relating to that person may disclose such information to an insurance provider pursuant to a claim for coverage made by that person under an existing policy. Such disclosures may only be made if the Bureau has not precluded indemnification or reimbursement for the claim.

We note that this revised language only authorizes disclosure to the extent necessary for the insurance provider to process and administer the claim for coverage. Further distribution or use of the information is prohibited. These limitations do not foreclose an insurance provider from using information that has been publicly disclosed by the Bureau in making future underwriting determinations regarding the person or for other purposes—even if that information was originally submitted to the insurance provider as confidential information under this provision.

Finally, the Bureau proposes to remove references to the Associate Director for Supervision, Enforcement, and Fair Lending's delegee. Such reference is no longer necessary because the new definition of Associate Director for Supervision, Enforcement, and Fair Lending, located at § 1070.2(b), includes delegees.

Section 1070.43 Disclosure of Confidential Information to Agencies

Section 1070.43 sets forth the circumstances in which the Bureau may disclose confidential information to other government agencies. The Bureau proposes revising the section's title and subtitles to delete the references to "law enforcement agencies" and "government" agencies because the references are superfluous. Instead, the title and subtitles will reference "Agencies." Likewise, as discussed above with respect to § 1070.2(a), the Bureau proposes revisions throughout the section to account for the newly proposed defined term "Agency." The Bureau proposes various other non-substantive technical corrections.

Section 1070.43(b) Discretionary Disclosure of Confidential Information to Agencies

Section 1070.43(b)(1)

Section 1070.43(b)(1) sets forth the standard under which the Bureau may disclose confidential information to other agencies in its discretion. The current rule establishes two distinct standards for disclosing confidential supervisory information and other confidential information. It states that the Bureau may disclose confidential information to an agency "to the extent that the disclosure of the information is relevant to the exercise of the [Agency's] statutory or regulatory authority." However, the Bureau may only share confidential supervisory information with agencies "having jurisdiction over a supervised financial institution." The Bureau proposes removing the separate standard for confidential supervisory information. This proposed change would align the two standards and provide the Bureau with discretion to disclose confidential supervisory information to another agency "to the extent that the disclosure of the information is relevant to the exercise of the [agency's] statutory or regulatory authority," as it may currently do with respect to other categories of confidential information.

This change is intended to facilitate communication and information-sharing among the Bureau and other governmental authorities. The Bureau has determined that sharing confidential supervisory information in situations where the disclosure of the information is relevant to the exercise of the receiving agency's statutory or regulatory authority will facilitate the Bureau's purposes and objectives. Multiple agencies engage in operations that have the potential to affect the offering and provision of consumer financial products and services, as well as the markets, industries, companies, and other persons relevant to the Bureau's work. In addition, multiple agencies have interests and obligations relating to implementation, interpretation, and enforcement of the Dodd-Frank Act and the other Federal consumer financial law administered by the Bureau. The proposed change will assist the Bureau in implementing and administering Federal consumer financial law in a more consistent and effective fashion, and enable the Bureau to work together with other agencies having responsibilities related to consumer financial matters. The Bureau also believes that the proposed change would comport with the intent of the Dodd-Frank Act, since effective coordination and communication among agencies is essential in order for the regulatory framework established by that Act to work as Congress intended.

In the Bureau's judgment, the current rule's restrictions have proven overly cumbersome in application, pose unnecessary impediments to cooperating with other agencies, and otherwise risk impairing the Bureau's ability to fulfill its statutory duties. Unnecessary impediments to information-sharing in such circumstances impede supervisory and enforcement coordination and create opportunities for potential conflict, inefficiency, and duplication of efforts across agencies. The Bureau believes that retaining discretion to share confidential supervisory information in such situations would better promote the Bureau's mission and overall effectiveness.

This proposal would codify the Bureau's revised interpretation of 12 U.S.C. 5512(c)(6). 12 U.S.C. 5512(c)(6) has three subparagraphs. 12 U.S.C. 5512(c)(6)(A) directs the Bureau to "prescribe rules regarding the confidential treatment of information obtained from persons in connection with the exercise of its authorities under Federal consumer financial law." 12 U.S.C. 5512(c)(6)(B) addresses disclosure of confidential supervisory information *to* the Bureau by certain agencies: Subparagraph (B)(i) requires that the Bureau "shall have access" to reports of examination or financial condition by "a prudential regulator or other Federal agency having jurisdiction over a covered person or service provider," and subparagraph (B)(ii) provides that the same agencies "may, in [their] discretion, furnish to the Bureau any other report or other confidential supervisory information concerning any [entity] examined by such agency . . . ." Meanwhile, 12 U.S.C. 5512(c)(6)(C) addresses disclosure of confidential supervisory information *by* the Bureau to certain agencies: Subparagraph (C)(i) requires that "a prudential regulator, a State regulator, or any other Federal agency having jurisdiction over a covered person or service provider shall have access to any report of examination made by the Bureau with respect to such person . . . ," and subparagraph (C)(ii) provides that the Bureau "may, in its discretion, furnish to a prudential regulator or other agency having jurisdiction over a covered person or service provider any other report or other confidential supervisory information concerning such person examined by the Bureau . . . ."

The Bureau had previously interpreted 12 U.S.C. 5512(c)(6)(C)(ii) to set forth a positive grant of authority that limits the Bureau's discretion to disclose confidential supervisory information under the rules authorized by 12 U.S.C. 5512(c)(6)(A). By only providing for the discretion to disclose confidential supervisory information to "prudential regulator[s] or other agenc[ies] having jurisdiction," it was assumed that the provision prohibited disclosure by the Bureau to agencies that lack "jurisdiction." The Bureau articulated this interpretation in the interim final rule and the final rule that established this subpart. *See* 76 FR 45372, 45373–75 (Jul. 28, 2011); 78 FR 11484, 11496 (Feb. 15, 2013).

12 U.S.C. 5512(c)(6)'s framework—providing the Bureau with broad discretion to draft confidentiality rules, followed by instructions related to the exchange of confidential supervisory information with certain agencies—is ambiguous. *See generally Adirondack Medical Center et al.* v. *Sebelius,* 740 F.3d 692 (D.C. Cir. 2014). The juxtaposition implies that the provisions relate to each other, but their terms leave the precise relationship unclear, resulting in more than one plausible interpretation. The Bureau's previous interpretation was reasonable, but the Bureau believes that an alternative interpretation is more reasonable.

12 U.S.C. 5512(c)(6)(A) provides the Bureau with broad discretion to draft rules regarding the confidential treatment of information. We think the better view is that Congress did not intend 12 U.S.C. 5512(c)(6)(C)(ii) to restrict that discretion. The language in subparagraph (C)(ii) is permissive—it says "the Bureau may, in its discretion" disclose confidential supervisory information to certain agencies. Notably, Congress did not include any restrictive language, such as "the Bureau may *only*" make certain disclosures. Understanding subparagraph (C)(ii) as a limit to the Bureau's discretion requires, essentially, reading the word "only" into text where it does not exist. We find this interpretation strained, as "Congress generally knows how to use the word 'only' when drafting laws." *Adirondack Medical Center,* 740 F.3d at 697.

Furthermore, 12 U.S.C. 5512(c)(6)(C)(ii) contrasts with 12 U.S.C. 5562(d)(2), where Congress clearly and unambiguously restricted the Bureau's discretion in drafting these same confidentiality rules by stating that "[n]o rule . . . shall be intended to prevent disclosure [to Congress]." The difference between the permissive language used in 12 U.S.C. 5512(c)(6)(C)(ii) and the restrictive language used in 12 U.S.C. 5562(d)(2) indicates that Congress intended the two provisions to act in different ways.

We also think that the presence of subparagraphs (B)(i), (B)(ii), and (C)(i) in 12 U.S.C. 5512(c)(6) demonstrate that subparagraph (C)(ii) could serve a purpose other than limiting subparagraph (A). Although subparagraph (C)(ii), in isolation, could perhaps be read as a limiting principle, statutory provisions should be read in context. *See, e.g., Food & Drug Admin.* v. *Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 132–33 (2000) ("The meaning—or ambiguity—of certain words or phrases may only become evident when placed in context."). That subparagraph (B) closely tracks the word-choice and structure of subparagraph (C) shows that they could and should be read in relation to each other. But by addressing the receipt, and not the disclosure, of confidential supervisory information, subparagraph (B) is substantively irrelevant to the Bureau's confidentiality rules; its inclusion indicates that the provisions can serve a purpose other than to restrict the Bureau's discretion in drafting its rule.

The Bureau believes that subparagraphs (B) and (C) can reasonably be read to establish an information-sharing regime with a limited set of agencies. The purpose of subparagraphs (B)(ii) and (C)(ii) is to contrast and limit the mandatory disclosures in subparagraphs (B)(i) and (C)(i), respectively. Whereas subparagraph (B)(i) requires a set of agencies (prudential regulators and Federal agencies having jurisdiction) to provide reports of examination or financial condition to the Bureau, subparagraph (B)(ii) clarifies that those same agencies have discretion with respect to disclosing other reports or other confidential supervisory information. Likewise, whereas subparagraph (C)(i) requires the Bureau to disclose reports of examination to prudential regulators, state regulators, and Federal regulators having jurisdiction, subparagraph (C)(ii) clarifies that disclosure of other reports and other confidential supervisory information to prudential regulators and other agencies is discretionary. The phrase "other report and other confidential supervisory information" clarifies, contrasts and narrows the reference to "report of examination" in subparagraph (C)(i).

The Bureau has already addressed subparagraph (C)(i)'s mandatory disclosures in the confidentiality rules at § 1070.43(a), and this paragraph remains unchanged. The Bureau's proposed revision to § 1070.43(b)(1) will include 12 U.S.C. 5512(c)(6)(C)(ii)'s discretionary disclosures of confidential supervisory information, and it will allow for additional disclosures to agencies that do not "hav[e] jurisdiction," so long as such disclosure is "relevant to the exercise of the [agency's] statutory or regulatory authority." 12 U.S.C. 5512(c)(6)(A)'s broad grant of authority to draft confidentiality rules provides the Bureau sufficient discretion to make this change.

Please note that the Bureau's policy regarding the disclosure of confidential supervisory information to law enforcement agencies, which we previously articulated in CFPB Bulletin 12–01 (Jan. 4, 2012), remains in place. The Bureau's revised interpretation of 12 U.S.C. 5512(c)(6) and its proposed revision to § 1070.43(b)(1) do not alter CFPB Bulletin 12–01.

Section 1070.43(b)(2)

Section 1070.43(b)(2) sets forth a process for agencies to submit written requests (sometimes referred to as "access requests") to the Bureau in order to obtain access to its confidential information pursuant to § 1070.43(b). Whereas the section currently requires submission of access requests to the General Counsel, the Bureau proposes to instead require submission to the Associate Director for Supervision, Enforcement, and Fair Lending. The Bureau believes that this change would lead to increased efficiency because the vast majority of access requests submitted to the Bureau pertain to work conducted by its Division of Supervision, Enforcement, and Fair Lending. The Associate Director for Supervision, Enforcement, and Fair Lending will continue to consult with other Bureau stakeholders, including the Legal Division, as necessary. The Bureau also proposes that access requests be emailed to a single email address, *accessrequests@cfpb.gov*, or to the Bureau's mailing address at 1700 G Street NW., Washington, DC 20552, in order to facilitate processing. In making these changes, the authority to act upon access requests would shift from the Legal Division to other Bureau staff with expertise more directly related to processing these requests.

In addition, for purposes of clarity, the Bureau proposes revising § 1070.43(b)(2)(iii) to state that, among other things, access requests must include a statement certifying and identifying the agency's "statutory or regulatory authority that is relevant to the requested information, as required by paragraph (b)(1)." We have found in our experience that the current formulation (the agency must certify or identify its "authority for requesting the documents") can lead to confusion.

Section 1070.43(c) State Requests for Information Other Than Confidential Information

Section 1070.43(c) states that state agency requests for information other than confidential information are not to be made and considered under § 1070.43. The Bureau proposes deleting this paragraph because it is unnecessary and can lead to confusion. Because, by its own terms, § 1070.43 only applies to confidential information, there is no need to state that it does not apply to information that is not confidential.

Section 1070.44 Disclosure of Confidential Consumer Complaint Information

Section 1070.44 addresses the Bureau's disclosure of confidential consumer complaint information in the course of investigating, resolving, or otherwise responding to consumer complaints. The Bureau proposes replacing the phrase "[n]othing in this subpart shall limit the discretion of the CFPB" with "[t]he CFPB may . . . ." This revision is intended to clarify that § 1070.44 authorizes such disclosure by the Bureau. The Bureau also proposes replacing the phrase "concerning financial institutions or consumer financial products and services" with "concerning consumer financial products and services or a violation of Federal consumer financial law" in order to clarify that the section broadly addresses any information received or generated by the Bureau through processes or procedures established under 12 U.S.C. 5493(b)(3), including where complaints do not concern financial institutions, or where the Bureau lacks authority to act on them.

Section 1070.45 Affirmative Disclosure of Confidential Information

Section 1070.45 addresses various instances where the Bureau may make disclosures of confidential information on its own initiative. The Bureau proposes several revisions to clarify, supplement, or amend the disclosures currently addressed in the section. Any disclosures made pursuant to this section must be made in accordance with applicable law.

The Bureau proposes deleting the reference in § 1070.45(a) to "confidential investigative information" in the phrase "confidential investigative information or other confidential information." Because confidential investigative information is a sub-category of confidential information, and § 1070.45(a) already addresses confidential information generally, the separate reference to confidential investigative information is unnecessary. Nevertheless, while the Bureau may disclose any category of confidential information under § 1070.45(a), disclosures made under this section—particularly paragraphs (a)(3), (a)(4), and (a)(5)—are more likely to involve confidential investigative information, rather than other categories of confidential information, such as confidential supervisory information.

Subparagraph (a)(2) addresses disclosure of confidential information to either House of the Congress, or to an appropriate committee or subcommittee of the Congress, as set forth in 12 U.S.C. 5562(d)(2). The current text states that, upon receipt of a request from the Congress for confidential information that a financial institution submitted to the Bureau along with a claim that such information consists of trade secret or privileged or confidential commercial or financial information, or confidential supervisory information, the Bureau "shall notify" the financial institution in writing of its receipt of the request and provide the institution with a copy of the request. The Bureau proposes revising the text to state that it "may notify" the financial institution in such circumstances. This revision will provide greater flexibility and more closely align with 12 U.S.C. 5562(d)(2), which states that the Bureau "is permitted to adopt rules allowing prior notice to any party that owns or otherwise provided the material to the Bureau and had designated such material as confidential."

Subparagraph (a)(3) pertains to the disclosure of confidential information in "investigational hearings and witness interviews, as is reasonably necessary, at the discretion of the CFPB." This paragraph was initially intended to address disclosure in the course of investigations and enforcement actions. *See* 76 FR 45372, 45375 (Jul. 28, 2011). The Bureau proposes revising the paragraph to state that it may disclose confidential information in "investigational hearings and witness interviews, or otherwise in the investigation and administration of enforcement actions, as is reasonably necessary, at the discretion of the CFPB." This revision clarifies that the Bureau may disclose confidential information in its discretion to conduct its investigations or perform administrative tasks to further its own enforcement actions. This includes, for example, disclosures to expert witnesses, service process servers, or other federal and state agencies that may provide assistance with space for investigational hearings or advise the Bureau on local rules regarding a court filing.

Subparagraph (a)(4) authorizes the disclosure of confidential information "[i]n an administrative or court proceeding to which the CFPB is a party." The Bureau proposes revising this paragraph to state that it may disclose confidential information "[i]n or related to an administrative or court proceeding to which the Bureau is a party." This revision clarifies that the Bureau may disclose confidential information not only during an administrative or court proceeding to which the Bureau is a party, such as in complaints and consent orders, but also when related to the Bureau's implementation of ongoing administrative or court orders. Such disclosures may be made in furtherance of the Bureau's reporting requirements and include, for example, updates on required consumer remuneration and the payment of civil money penalties.

Subparagraph (a)(4) also enables the submitter of such information to seek a protective or other order prior to such disclosure. For clarity, the Bureau proposes replacing the phrase "confidential investigatory materials" with "confidential investigative information," a defined term used throughout the rule. Likewise, the Bureau proposes replacing the reference to "appropriate protective or in camera order" with "appropriate order," which would encompass both examples in the current version. Finally, the Bureau proposes revising the rule to also allow the Bureau to seek an appropriate order in its discretion. Whereas the current text only discusses the submitter seeking such an order, there may be times where it would be more efficient or appropriate for the Bureau itself to make such a request.

Subparagraph (a)(5) addresses disclosure to other agencies of confidential information in summary form to notify them about potential violations of law subject to their jurisdiction. The purpose of this provision is to allow the Bureau to inform agencies about potential legal violations in which they may have an interest, including situations in which they may wish to submit a request for information under § 1070.43. The Bureau proposes revising this paragraph to authorize disclosure to "Agencies in summary form to the extent necessary to confer with such Agencies about matters relevant to the exercise of the Agencies' statutory or regulatory authority." This revision would clarify the paragraph's intended purpose and more closely align with the standard used for disclosing confidential information to agencies under § 1070.43.

Finally, the Bureau proposes a new subparagraph that states that the Bureau may disclose confidential information in "CFPB personnel matters, as necessary and subject to appropriate protections." This revision is intended to clarify that confidential information may at times be disclosed in the course of equal employment opportunity matters, grievance proceedings, and other personnel matters. Any such disclosures would only be made as necessary, in accordance with applicable law, and subject to appropriate protections. The Bureau proposes re-numbering § 1070.45 to account for this new paragraph.

Section 1070.47 Other Rules Regarding the Disclosure of Confidential Information

The Bureau proposes reorganizing § 1070.47 for clarity. Specifically, it proposes moving subparagraph 1070.47(a)(5) to immediately after subparagraph 1070.47(a)(2). The Bureau proposes this change because the two subparagraphs both address further disclosure by the recipient of confidential information. The Bureau further proposes making subparagraph 1070.47(a)(3), which addresses third-party requests for information, a new paragraph titled "Third party requests for information." This revision will highlight the provision and lead to better ease of use. Finally, the Bureau proposes re-numbering the section to account for these changes.

Section 1070.47(a) Further Disclosure Prohibited

Section 1070.47(a) describes certain steps that recipients of confidential information under subpart D must take to protect the information. It notes that confidential information disclosed under this subpart remains Bureau property, it prohibits further disclosure of confidential information without the Bureau's prior written permission, and it sets forth procedures to follow in the event that a recipient of confidential information receives from a third party a legally enforceable demand for the information.

Consistent with proposed revisions to § 1070.43(b), the Bureau proposes shifting from its General Counsel to the Associate Director for Supervision, Enforcement, and Fair Lending the authority in subparagraph (a)(1) to provide in writing that confidential information is no longer Bureau property, and the authority in subparagraph (a)(2) to provide written permission to further disclose confidential information. The Bureau believes that this change would lead to increased efficiency because the vast majority of access requests submitted to the Bureau pertain to work conducted by its Division of Supervision, Enforcement, and Fair Lending. The General Counsel's authority with respect to legally enforceable demands or requests for confidential information, described in subparagraph (a)(3), will remain with the General Counsel. Finally, as discussed above with respect to § 1070.2(a), the Bureau proposes revisions to account for the newly proposed defined term "agency."

Section 1070.47(d) Return or Destruction of Records

The Bureau proposes adding a new paragraph (d) to clarify that the Bureau may require any person in possession of confidential information to return the records to the Bureau or destroy them.

Section 1070.47(e) Non-Waiver of CFPB Rights

The Bureau proposes adding a new paragraph (e) to clarify that the Bureau's disclosure of confidential information under subpart D does not waive the Bureau's right to control, or impose limitations on, the subsequent use and dissemination of its confidential information.

Section 1070.47(f) Non-Waiver of Privilege

The Bureau proposes moving the former paragraph (c), *Non-waiver,* to a new paragraph (f), and making corresponding technical corrections to subparagraph (f)(2), in order to account for the two newly proposed paragraphs described above. In addition, the Bureau proposes replacing the title "Non-waiver" with a new title "Non-waiver of privilege" so as to clarify the distinction between this paragraph and the newly proposed paragraph (e), *Non-waiver of CFPB rights.* As discussed previously in the preamble to the Bureau's final rule, Confidential Treatment of Privileged Information, 77 FR 39671 (Jul 5, 2012), this provision applies to situations where the Bureau transfers information to, or permits information to be used by, agencies.

Section 1070.47(g) Reports of Unauthorized Disclosure

The Bureau proposes adding a new paragraph (g) to require any persons in possession of confidential information to immediately notify the Bureau upon discovery of any disclosures of confidential information made in violation of subpart D.

Section 1070.48 Privileges Not Affected by Disclosure to the CFPB

Section 1070.48 provides that the submission by any person of any information to the Bureau in the course of the Bureau's supervisory or regulatory processes will not waive or otherwise affect any privilege such person may claim with respect to such information under Federal or State law as to any other person or entity. This section was promulgated separately from the rest of this rule in a final rule, Confidential Treatment of Privileged Information, 77 FR 39617 (Jul. 5, 2012). Congress subsequently enacted Public Law 112–215, 126 Stat. 1589, Dec. 20, 2012, which amended 12 U.S.C. 1828(x) to provide these same protections to privileged information submitted to the Bureau. Because 12 U.S.C. 1828(x), as revised, provides the exact same protections as § 1070.48, it renders § 1070.48 superfluous and unnecessary going forward. To avoid confusion, the Bureau proposes deleting the current text of § 1070.48.

Section 1070.48 Disclosure of Confidential Information by the Inspector General

The Bureau proposes adding a new section to clarify that part 1070 does not limit the discretion of its Inspector General's office to disclose confidential information as needed in fulfilling its responsibilities under the Inspector General Act of 1978, 5 U.S.C. App. 3. Because the Bureau proposes deleting the current text of § 1070.48, this new section would replace that text.

Subpart E—The Privacy Act

Section 1070.51 Authority and Responsibilities of the Chief Privacy Officer

Section 1070.51 specifies the authority and responsibilities of the Bureau's Chief Privacy Officer. The Bureau proposes to add a new paragraph at § 1070.51(a) authorizing the Chief Privacy Officer to "[d]evelop, implement, and maintain an organization-wide privacy program" and to renumber the other paragraphs in § 1070.51 to reflect this change. This change is in accordance with National Institute of Standards and Technology (NIST) Special Publication 800–53 Revision 4, which provides that agencies should "[appoint] a Senior Agency Official for Privacy (SAOP)/ Chief Privacy Officer (CPO) accountable for developing, implementing, and maintaining an organization-wide governance and privacy program to ensure compliance with all applicable laws and regulations regarding the collection, use, maintenance, sharing, and disposal of personally identifiable information (PII) by programs and information systems . . . ." The Bureau proposes this change to clarify the authority of its Chief Privacy Officer.

Section 1070.53 Request for Access to Records

Section 1070.53(a) Procedures for Making a Request for Access to records

Section 1070.53(a) specifies the procedures for making Privacy Act requests for records. The current text distinguishes between requests made in writing and by electronic means. The Bureau proposes a technical change to this provision. It proposes to remove the phrase "or by electronic means" and add "as follows:" in its place. The Bureau also proposes changes to section 1070.53(a)(1) to clarify how requesters must submit Privacy Act requests to the Bureau. The Bureau proposes similar changes to sections 1070.56(a) and 1070.58(b).

Section 1070.56 Request for Amendment of Records

Section 1070.56(a) Procedures for Making Request

Section 1070.56(a)(2)(i)

Section 1070.56(a)(2)(i) provides that an individual requesting an amendment of a record must identify the system of records containing the record. The Bureau proposes to revise this provision to allow an individual to provide a description of the record in sufficient detail to allow Bureau personnel to locate the system of records containing the record. This revision would provide a requester with more flexibility in the event that the requester does not know the precise name of the applicable system of records. Furthermore, this change is consistent with § 1070.53(b)(2), which specifies requirements for requests for access to records.

Section 1070.61 Training; Rules of Conduct; Penalties for Non-Compliance

Section 1070.61 addresses, among other things, the CFPB's obligations to conduct privacy-related training and establish rules of conduct related to privacy. The Bureau proposes to replace references to "employees of Government contractors" with the term "contract personnel" to avoid confusion with respect to § 1070.2(l), which defines the term "employee."

Part 1091—Procedural Rule To Establish Supervisory Authority Over Certain Nonbank Covered Persons Based on Risk Determination

Section 1091.103 Contents of Notice

The Bureau proposes to revise subparagraph 1091.103(a)(2)(vii) to remove the cross-reference to § 1070.2(i)(1) and replace it with the appropriate cross-reference to § 1070.2(j).

Section 1091.115 Change of Time Limits and Confidentiality of Proceedings

The Bureau proposes to revise paragraph 1091.115(c) to remove the cross-reference to § 1070.2(i)(1) and replace it with the appropriate cross-reference to § 1070.2(j).

V. Section 1022(b)(2)(A) of the Dodd-Frank Act

In developing this proposed rule, the Bureau has considered the potential benefits, costs, and impacts required by section 1022(b)(2)(A) of the Dodd-Frank Act. The Bureau has consulted, or offered to consult with, the prudential regulators and the Federal Trade Commission including consultation regarding consistency with any prudential, market, or systemic objectives administered by such agencies.[3]

The Bureau has chosen to consider the benefits, costs, and impacts of the proposed provisions as compared to the status quo: The current statutory provisions and the regulations as set forth by the Bureau on February 15, 2013, 78 FR 11483 (Feb. 15, 2013) (which includes the protections for privileged information which Congress enacted in Public Law 112–215, 126 Stat. 1589, Dec. 20, 2012, which amended 12 U.S.C. 1828(x)).[4] At this time, the Bureau does not have data with which to quantify the benefits or costs of the proposed rule.

In this analysis, the Bureau focuses on the benefits, costs, and impacts of the main aspects of the proposed rule. The proposed changes to the definitions in subpart A would alter the treatment of certain information submitted to the Bureau. The revised definition of confidential consumer complaint information would now include any information received or generated by the CFPB through processes or procedures established under 12 U.S.C. 5493(b)(3), clarifying that any complaints submitted to the CFPB through its Consumer Response system, and any information generated therein, are similarly classified under its confidentiality rules and subject to the same confidentiality protections. The revised definition of confidential supervisory information will no longer include reference to information collected using the Bureau's market monitoring authority.

The proposed changes in subpart D would alter the rules concerning the disclosure of confidential investigative information to and by financial institutions and their affiliates by lending clarity to the Bureau's disclosures of confidential investigative information in the enforcement context; providing that recipients of confidential investigative information have the same discretion with respect to disclosing confidential investigative information that they currently have with respect to confidential supervisory information; providing that, in addition to disclosing information concerning a person, its affiliates, or its service providers to that person or its affiliates, the Bureau may also disclose such information to its service providers; and providing that a person lawfully in possession of confidential supervisory information or confidential investigative information provided directly to it by the Bureau pursuant to § 1070.42 may disclose the information to an insurance provider to the extent necessary for the insurance provider to process and administer any claims for coverage.

The proposed changes also alter the rules concerning the sharing of confidential supervisory information between the Bureau and other agencies by providing the Bureau with discretion to disclose confidential supervisory information to another agency "to the extent that the disclosure of the information is relevant to the exercise of the [agency's] statutory or regulatory authority," rather than to another agency "having jurisdiction over a supervised financial institution."

Lastly, the proposed rule would authorize the Bureau, upon receipt of prior consent, to disclose confidential information that directly or indirectly identifies particular persons. The proposed rule also includes clarifications that the Bureau may disclose confidential information in its discretion as needed to conduct its investigations or perform administrative tasks to further its own enforcement actions; and, that the Bureau may disclose confidential information not only during an administrative or court proceeding to which the Bureau is a party, such as in complaints and consent orders, but also when related to the Bureau's implementation of ongoing administrative or court orders.

The Bureau views the remainder to the proposed rule to mainly include clarifications, corrections and technical changes.

The proposed revisions to the definition of confidential consumer complaint information would provide benefits for consumers and covered persons. Specifically, the expansion of the definition of confidential consumer complaint information should afford greater protections to consumers submitting, and covered persons referenced by, any misdirected complaints that the Bureau receives and that are now covered under the definition.

The change to the definition of confidential supervisory information and the proposed changes regarding information sharing would also benefit consumer and covered persons. Removing market monitoring information that contains confidential business information or personal information from the definition would have limited effect since such information would be subject to the same protections currently accorded to it, including the limitations on public disclosures and disclosures to other regulators. In contrast, the Bureau would have more flexibility to use and disclose less sensitive, non-confidential information collected for market monitoring purposes such as data that are already publicly available. The lesser burden should allow the Bureau to implement and administer Federal consumer financial law more efficiently.

Regarding the proposed provisions related to sharing information, consumers would benefit, to the extent that each of these changes allows more efficient sharing of confidential information between the CFPB and various parties and thus also results in more efficient administration of consumer financial laws. Covered persons would benefit, to the extent that the efficiencies embodied in these changes reduce costs either by altering and simplifying the covered person's obligations or by allowing for more efficient sharing among regulators that interact with the covered person. For example, the creation of one standard for how covered persons can share confidential supervisory information and confidential investigative information would lower the internal costs at these firms.

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[3] Section 1022(b)(2)(A) of the Dodd-Frank Act addresses the consideration of the potential benefits and costs of regulation to consumers and covered persons, including the potential reduction of access by consumers to consumer financial products or services; the impact on depository institutions and credit unions with $10 billion or less in total assets as described in section 1026 of the Dodd-Frank Act; and the impact on consumers in rural areas. Section 1022(b)(2)(B) directs the Bureau to consult, before and during the rulemaking, with appropriate prudential regulators or other Federal agencies, regarding consistency with objectives those agencies administer.

[4] The Bureau has discretion in any rulemaking to choose an appropriate scope of analysis with respect to potential benefits and costs and an appropriate baseline.

The changes in the sharing provisions of the rule may entail certain costs to covered persons. The broader sharing of information provided for in the proposed rule has an increased risk for a loss of confidentiality. However, as noted above, the Bureau has sought to provide the maximum protection for confidential information, while ensuring its ability to share or disclose information to the extent necessary to achieve its mission. The Bureau will continue to appropriately protect sensitive information. Further, as noted in the original 2013 rule, increased sharing of information under the proposed the rule may increase the volume and costs of litigation or regulatory action for covered persons whose information the Bureau will share with other agencies, and which such agencies may use as bases for administrative or judicial actions against covered persons. To the extent that such costs occur, the Bureau believes that in most cases these costs would be associated with concomitant benefits to consumers from the prevention or remedy of harms associated with violations of law by covered persons.

The CFPB does not expect that the proposed rule would have an appreciable impact on consumers' access to consumer financial products or services. The scope of the rulemaking is limited to matters related to access to and disclosure of certain types of information, and does not relate to credit access.

The Bureau does not believe that this proposed rule would have a unique impact on insured depository institutions or insured credit unions with less than $10 billion in assets as described in section 1026(a) of the Dodd-Frank Act. Since such institutions are not supervised by the Bureau, they are generally less likely to share information with the Bureau and therefore any impacts of the rule from the provisions on supervisory information may indeed be less compared to other institutions.

The Bureau also does not believe that this proposed rule would have a unique impact on consumers in rural areas. To the extent that these consumers may use smaller financial service providers not supervised by the Bureau, and therefore less likely to share information with the Bureau, the impacts of the rule from the provisions on supervisory information for these consumers may indeed be less than for other consumers.

VI. Procedural Requirements

The Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (the RFA), requires each agency to consider the potential impact of its regulations on small entities, including small businesses, small governmental units, and small not-for-profit organizations, unless the head of the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. The undersigned so certifies. The rule does not impose any obligations or standards of conduct for purposes of analysis under the RFA, and it therefore does not give rise to a regulatory compliance burden for small entities.

Finally, the Bureau has determined that this proposed rule does not impose any new recordkeeping, reporting, or disclosure requirements on members of the public that would be collections of information requiring approval under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*

List of Subjects

12 CFR Part 1070

Confidential business information, Consumer protection, Freedom of information, Privacy.

12 CFR Part 1091

Administrative practice and procedure, Consumer protection, Credit, Trade practices.

Authority and Issuance

For the reasons set forth in the preamble, the Bureau proposes to amend chapter X of title 12 of the CFR to read as follows:

PART 1070—DISCLOSURE OF RECORDS AND INFORMATION

■ 1. Revise part 1070 to read as follows.

Subpart A—General Provisions and Definitions

Sec.
1070.1 Authority, purpose and scope.
1070.2 General definitions.
1070.3 Custodian of records; certification; alternative authority.
1070.4 Records of the CFPB not to be otherwise disclosed.
1070.5 Service of summonses and complaints

Subpart B—Freedom of Information Act

1070.10 General.
1070.11 Information made available; discretionary disclosures.
1070.12 Publication in the Federal Register.
1070.13 Public inspection in an electronic format.
1070.14 Requests for CFPB records.
1070.15 Responsibility for responding to requests for CFPB records.
1070.16 Timing of responses to requests for CFPB records.
1070.17 Requests for expedited processing.
1070.18 Responses to requests for CFPB records.
1070.19 Classified information.
1070.20 Requests for business information provided to the CFPB.
1070.21 Administrative appeals.
1070.22 Fees for processing requests for CFPB records.
1070.23 Authority and responsibilities of the Chief FOIA Officer.

Subpart C—Disclosure of CFPB Information in Connection With Legal Proceedings

1070.30 Purpose and scope; definitions.
1070.31 Service of subpoenas, court orders, and other demands for CFPB information or action.
1070.32 Testimony and production of documents prohibited unless approved by the General Counsel.
1070.33 Procedure when testimony or production of documents is sought; general.
1070.34 Procedure when response to demand is required prior to receiving instructions.
1070.35 Procedure in the event of an adverse ruling.
1070.36 Considerations in determining whether the CFPB will comply with a demand or request.
1070.37 Prohibition on providing expert or opinion testimony.

Subpart D—Confidential Information

1070.40 Purpose and scope.
1070.41 Non-disclosure of confidential information.
1070.42 Disclosure of confidential supervisory information and confidential investigative information.
1070.43 Disclosure of confidential information to agencies.
1070.44 Disclosure of confidential consumer complaint information.
1070.45 Affirmative disclosure of confidential information.
1070.46 Other disclosures of confidential information.
1070.47 Other rules regarding the disclosure of confidential information.
1070.48 Disclosure of confidential information by the Inspector General.

Subpart E—Privacy Act

1070.50 Purpose and scope; definitions.
1070.51 Authority and responsibilities of the Chief Privacy Officer.
1070.52 Fees.
1070.53 Request for access to records.
1070.54 CFPB procedures for responding to a request for access.
1070.55 Special procedures for medical records.
1070.56 Request for amendment of records.
1070.57 CFPB review of a request for amendment of records.
1070.58 Appeal of adverse determination of request for access or amendment.

1070.59 Restrictions on disclosure.
1070.60 Exempt records.
1070.61 Training; rules of conduct; penalties for non-compliance.
1070.62 Preservation of records.
1070.63 Use and collection of Social Security numbers.

Authority: 12 U.S.C. 5481 *et seq.;* 5 U.S.C. 552; 5 U.S.C. 552a; 18 U.S.C. 1905; 18 U.S.C. 641; 44 U.S.C. ch. 31; 44 U.S.C. ch. 35; 12 U.S.C. 3401 *et seq.*

Subpart A—General Provisions and Definitions

§ 1070.1 Authority, purpose, and scope.

(a) *Authority.* (1) This part is issued by the Bureau of Consumer Financial Protection, an independent Bureau within the Federal Reserve System, pursuant to the Consumer Financial Protection Act of 2010, 12 U.S.C. 5481 *et seq.;* the Freedom of Information Act, 5 U.S.C. 552; the Privacy Act of 1974, 5 U.S.C. 552a; the Federal Records Act, 44 U.S.C. 3101; the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.;* the Right to Financial Privacy Act of 1978, 12 U.S.C. 3401; the Trade Secrets Act, 18 U.S.C. 1905; 18 U.S.C. 641; and any other applicable law that establishes a basis for the exercise of governmental authority by the CFPB.

(2) This part establishes mechanisms for carrying out the CFPB's statutory responsibilities under the statutes in paragraph (a)(1) of this section to the extent those responsibilities require the disclosure, production, or withholding of information. In this regard, the CFPB has determined that the CFPB, and its delegates, may disclose information of the CFPB, in accordance with the procedures set forth in this part, whenever it is necessary or appropriate to do so in the exercise of any of the CFPB's authority. The CFPB has determined that all such disclosures, made in accordance with the rules and procedures specified in this part, are authorized by law.

(b) *Purpose and scope.* This part contains the CFPB's rules relating to the disclosure of records and information generated by and obtained by the CFPB.

(1) Subpart A contains general provisions and definitions used in this part.

(2) Subpart B implements the Freedom of Information Act, 5 U.S.C. 552.

(3) Subpart C sets forth the procedures with respect to subpoenas, orders, or other requests for CFPB information in connection with legal proceedings.

(4) Subpart D provides for the protection of confidential information and procedures for sharing confidential information with supervised institutions, government agencies, and others in certain circumstances.

(5) Subpart E implements the Privacy Act of 1974, 5 U.S.C. 552a.

§ 1070.2 General definitions.

For purposes of this part:

(a) *Agency* means a Federal, State, or foreign governmental authority, or an entity exercising governmental authority.

(b) *Associate Director for Supervision, Enforcement and Fair Lending* means the Associate Director for Supervision, Enforcement and Fair Lending of the CFPB or any CFPB employee to whom the Associate Director for Supervision, Enforcement and Fair Lending has delegated authority to act under this part.

(c) *Business day* means any day except Saturday, Sunday or a legal Federal holiday.

(d) *CFPB* means the Bureau of Consumer Financial Protection.

(e) *Chief FOIA Officer* means the Chief Operating Officer of the CFPB, or any CFPB employee to whom the Chief Operating Officer has delegated authority to act under this part.

(f) *Chief Operating Officer* means the Chief Operating Officer of the CFPB, or any CFPB employee to whom the Chief Operating Officer has delegated authority to act under this part.

(g) *Confidential information* means confidential consumer complaint information, confidential investigative information, and confidential supervisory information, as well as any other CFPB information that may be exempt from disclosure under the Freedom of Information Act pursuant to 5 U.S.C. 552(b). Confidential information does not include information contained in records that have been made publicly available by the CFPB or information that has otherwise been publicly disclosed by an employee, or agent of the CFPB, with the authority to do so. Confidential information obtained by a third party or otherwise incorporated in the records of a third party, including another Agency, shall remain confidential information subject to this Part.

(h) *Confidential consumer complaint information* means information received or generated by the CFPB through processes or procedures established under 12 U.S.C. 5493(b)(3), to the extent that such information is exempt from disclosure pursuant to 5 U.S.C. 552(b).

(i) *Confidential investigative information* means:

(1) Any documentary material, written report, or written answers to questions, tangible thing, or transcript of oral testimony received by the CFPB in any form or format pursuant to a civil investigative demand, as those terms are set forth in 12 U.S.C. 5562, or received by the CFPB voluntarily in lieu of a civil investigative demand; and

(2) Any other documents, materials, or records prepared by, on behalf of, received by, or for the use by the CFPB or any other Agency in the conduct of enforcement activities, and any information derived from such materials.

(j) *Confidential supervisory information* means:

(1) Reports of examination, inspection and visitation, non-public operating, condition, and compliance reports, supervisory letter, or similar document, and any information contained in, derived from, or related to such documents;

(2) Any documents, materials, or records, including reports of examination, prepared by, or on behalf of, or for the use of the CFPB or any other Agency in the exercise of supervisory authority over a financial institution, and any information derived from such documents, materials, or records;

(3) Any communications between the CFPB and a supervised financial institution or a Federal, State, or foreign government agency related to the CFPB's supervision of the institution;

(4) Any information provided to the CFPB by a financial institution for purposes of detecting and assessing risks to consumers and to markets for consumer financial products or services pursuant to 12 U.S.C. 5414(b)(1)(C), 5515(b)(1)(C), or 5516(b), or to assess whether an institution should be considered a covered person, as that term is defined by 12 U.S.C. 5481, or is subject to the CFPB's supervisory authority; and/or

(5) Information that is exempt from disclosure pursuant to 5 U.S.C. 552(b)(8).

(k) *Director* means the Director of the CFPB or his or her designee, or a person authorized to perform the functions of the Director in accordance with law.

(l) *Employee* means all current employees or officials of the CFPB, including contract personnel, the employees of the Office of the Inspector General of the Board of Governors of the Federal Reserve System and the Consumer Financial Protection Bureau, and any other individuals who have been appointed by, or are subject to the supervision, jurisdiction, or control of the Director, as well as the Director. The procedures established within this part also apply to former employees where specifically noted.

(m) *Financial institution* means any person involved in the offering or provision of a "financial product or service," including a "covered person" or "service provider," as those terms are defined by 12 U.S.C. 5481.

(n) *General Counsel* means the General Counsel of the CFPB or any CFPB employee to whom the General Counsel has delegated authority to act under this part.

(o) *Person* means an individual, partnership, company, corporation, association (incorporated or unincorporated), trust, estate, cooperative organization, or other entity.

(p) *Report of examination* means the report prepared by the CFPB concerning the examination or inspection of a supervised financial institution.

(q) *State* means any State, territory, or possession of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, Guam, American Samoa, or the United States Virgin Islands or any Federally recognized Indian tribe, as defined by the Secretary of the Interior under section 104(a) of the Federally Recognized Indian Tribe List Act of 1994 (25 U.S.C. 479a–1(a)), and includes any political subdivision thereof.

(r) *Supervised financial institution* means a financial institution that is or that may become subject to the CFPB's supervisory authority.

§ 1070.3 Custodian of records; certification; alternative authority.

(a) *Custodian of records.* The Chief Operating Officer is the official custodian of all records of the CFPB, including records that are in the possession or control of the CFPB or any CFPB employee.

(b) *Certification of record.* The Chief Operating Officer may certify the authenticity of any CFPB record or any copy of such record, or the absence thereof, for any purpose, and for or before any duly constituted Federal or State court, tribunal, or agency.

(c) *Alternative authority.* Any action or determination required or permitted to be done by the Chief Operating Officer may be done by any employee who has been duly designated for this purpose by the Chief Operating Officer.

§ 1070.4 Records of the CFPB not to be otherwise disclosed.

Except as provided by this part, employees or former employees of the CFPB, or others in possession of a record of the CFPB that the CFPB has not already made public, are prohibited from disclosing such records, without authorization, to any person who is not an employee of the CFPB.

§ 1070.5 Service of summonses and complaints.

(a) Only the General Counsel is authorized to receive and accept summonses or complaints sought to be served upon the CFPB or CFPB employees sued in their official capacity. Such documents should be served upon the General Counsel, Consumer Financial Protection Bureau, 1700 G Street NW., Washington, DC 20552. This authorization for receipt shall in no way affect the requirements of service elsewhere provided in applicable rules and regulations.

(b) If, notwithstanding paragraph (a) of this section, any summons or complaint described in that paragraph is delivered to an employee of the CFPB, the employee shall decline to accept the proffered service and may notify the person attempting to make service of the regulations set forth herein. If, notwithstanding this instruction, an employee accepts service of a document described in paragraph (a) of this section, the employee shall immediately notify and deliver a copy of the summons and complaint to the General Counsel.

(c) When a CFPB employee is sued in an individual capacity for an act or omission occurring in connection with duties performed on behalf of the CFPB (whether or not the officer or employee is also sued in an official capacity), the employee by law is to be served personally with process. *See* Fed. R. Civ. P. 4(i)(3). An employee sued in an individual capacity for an act or omission occurring in connection with duties performed on behalf of the CFPB shall immediately notify, and deliver a copy of the summons and complaint to, the General Counsel.

(d) The CFPB will only accept service of process for an employee sued in his or her official capacity. Documents for which the General Counsel accepts service in official capacity shall be marked "Service Accepted in Official Capacity Only." Acceptance of service shall not constitute an admission or waiver with respect to jurisdiction, propriety of service, improper venue, or any other defense in law or equity available under applicable laws or rules.

Subpart B—Freedom of Information Act

§ 1070.10 General.

This subpart contains the regulations of the CFPB implementing the Freedom of Information Act (the FOIA), 5 U.S.C. 552, as amended. These regulations set forth procedures for requesting access to records maintained by the CFPB. These regulations should be read together with the FOIA, the 1987 Office of Management and Budget Guidelines for FOIA Fees, the CFPB's Privacy Act regulations set forth in subpart E, and the FOIA Web page on the CFPB's Web site, *http://www.consumerfinance.gov*, which provide additional information about this topic.

§ 1070.11 Information made available; discretionary disclosures.

(a) *In general.* The FOIA provides for public access to information and records developed or maintained by Federal agencies. Generally, the FOIA divides agency information into three major categories and provides methods by which each category of information is to be made available to the public. The three major categories of information are as follows:

(1) Information required to be published in the **Federal Register** (see § 1070.12);

(2) Information required to be made available for public inspection and in an electronic format or, in the alternative, to be published and offered for sale (see § 1070.13); and

(3) Information required to be made available to any member of the public upon specific request (see §§ 1070.14 through 1070.22).

(b) *Discretionary disclosures.* Even though a FOIA exemption may apply to the information or records requested, the CFPB may, if not precluded by law, elect under the circumstances not to apply the exemption. The fact that the exemption is not applied by the CFPB in response to a particular request shall have no precedential significance in processing other requests, but is merely an indication that, in the processing of the particular request, the CFPB finds no necessity for applying the exemption.

(c) *Disclosures of records frequently requested.* Subject to the application of the FOIA exemptions and exclusions (5 U.S.C. 552(b) and (c)), the CFPB shall make publicly available, as provided by § 1070.13, all records regardless of form or format, which have been released previously to any person under 5 U.S.C. 552(a)(3) and §§ 1070.14 through 1070.22, and which the CFPB determines have become or are likely to become the subject of subsequent requests for substantially the same records. When the CFPB receives three (3) or more requests for substantially the same records, then the CFPB shall also make the released records publicly available.

§ 1070.12 Publication in the Federal Register.

(a) *Requirement.* The CFPB shall separately state, publish and maintain current in the **Federal Register** for the guidance of the public the following information:

(1) Descriptions of its central and field organization and the established place at which, the persons from whom, and the methods whereby, the public may obtain information, make submissions or requests, or obtain decisions;

(2) Statements of the general course and method by which its functions are channeled and determined, including the nature and requirements of all formal and informal procedures available;

(3) Rules of procedure, descriptions of forms available or the places at which forms may be obtained, and instructions as to the scope and contents of all papers, reports, or examinations;

(4) Substantive rules of general applicability adopted as authorized by law, and statements of general policy or interpretations of general applicability formulated and adopted by the CFPB; and

(5) Each amendment, revision, or repeal of matters referred to in paragraphs (a)(1) through (4) of this section.

(b) *Exceptions.* Publication of the information under paragraph (a) of this section shall be subject to the application of the FOIA exemptions and exclusions (5 U.S.C. 552(b) and (c)) and the limitations provided in 5 U.S.C. 552(a)(1).

§ 1070.13 Public inspection in an electronic format.

(a) *In general.* Subject to the application of the FOIA exemptions and exclusions (5 U.S.C. 552(b) and (c)), the CFPB shall, in conformance with 5 U.S.C. 552(a)(2), make available for public inspection in an electronic format, including by posting on the CFPB's Web site, *http://www.consumerfinance.gov,* or, in the alternative, promptly publish and offer for sale the following information:

(1) Final opinions, including concurring and dissenting opinions, and orders made in the adjudication of cases;

(2) Those statements of policy and interpretations which have been adopted by the CFPB but are not published in the **Federal Register**;

(3) Its administrative staff manuals and instructions to staff that affect a member of the public;

(4) Copies of all records made publicly available pursuant to § 1070.11; and

(5) A general index of the records referred to in paragraph (a)(4) of this section.

(b) *Information made available online.* For records required to be made available for public inspection in an electronic format pursuant to 5 U.S.C. 552(a)(2) (paragraphs (a)(1) through (4) of this section), as soon as practicable, the CFPB shall make such records available on its e-FOIA Library, located at *http://www.consumerfinance.gov.*

(c) *Record availability at the on-site e-FOIA Library.* Any member of the public may, upon request, access the CFPB's e-FOIA Library via a computer terminal at 1700 G Street NW., Washington, DC 20552. Such a request may be made by electronic means as set forth on the CFPB's Web site, *http://www.consumerfinance.gov,* or in writing, to the Chief FOIA Officer, Consumer Financial Protection Bureau, 1700 G Street NW., Washington, DC 20552. The request must indicate a preferred date and time for the requested access. The CFPB reserves the right to arrange a different date and time with the requester, if necessary.

(d) *Redaction of identifying details.* To prevent a clearly unwarranted invasion of personal privacy, the CFPB may redact identifying details contained in any matter described in paragraphs (a)(1) through (4) of this section before making such matters available for inspection or publication. The justification for the redaction shall be explained fully in writing, and the extent of such redaction shall be indicated on the portion of the record which is made available or published, unless including that indication would harm an interest protected by the exemption in 5 U.S.C. 552(b) under which the redaction is made. If technically feasible, the extent of the redaction shall be indicated at the place in the record where the redaction is made.

§ 1070.14 Requests for CFPB records.

(a) *In general.* Subject to the application of the FOIA exemptions and exclusions (5 U.S.C. 552(b) and (c)), the CFPB shall promptly make its records available to any person pursuant to a request that conforms to the rules and procedures of this section.

(b) *Form of request.* A request for records of the CFPB shall be made in writing as follows:

(1) If a request is submitted by mail or delivery service, it shall be addressed to the Chief FOIA Officer, Consumer Financial Protection Bureau, 1700 G Street NW., Washington, DC 20552. The request shall be labeled "Freedom of Information Act Request."

(2) If a request is submitted by electronic means, it shall be submitted as set forth on the CFPB's Web site, *http://www.consumerfinance.gov.* The request shall be labeled "Freedom of Information Act Request."

(c) *Content of request.* (1) In order to ensure the CFPB's ability to respond in a timely manner, a FOIA request should describe the records that the requester seeks in sufficient detail to enable CFPB personnel to locate them with a reasonable amount of effort. Whenever possible, the request should include specific information about each record sought, such as the date, title or name, author, recipient, and subject matter of the record. If known, the requester should include any file designations or descriptions for the records requested. As a general rule, the more specific the requester is about the records or type of records requested, the more likely the CFPB will be able to locate those records in response to the request;

(2) In order to ensure the CFPB's ability to communicate effectively with the requester, a request should include contact information for the requester, including the name of the requester and, to the extent available, a mailing address, telephone number, and email address at which the CFPB may contact the requester regarding the request;

(3) The request should state whether the requester wishes to inspect the records or desires to receive an electronic copy or have a copy made and furnished without first inspecting the records;

(4) For the purpose of determining any fees that may apply to processing a request, a requester should indicate in the request whether the requester is a commercial user, an educational institution, non-commercial scientific institution, representative of the news media, governmental entity, or "other" requester, as those terms are defined in § 1070.22(b), and the basis for claiming that fee category. Requesters may seek assistance in determining the appropriate fee category by contacting the CFPB's FOIA Public Liaison at the telephone number listed on the CFPB's Web site, *http://www.consumerfinance.gov.*

(5) If a requester seeks a waiver or reduction of fees associated with processing a request, then the request shall include a statement to that effect as is required by § 1070.22(e); and

(6) If a requester seeks expedited processing of a request, then the request must include a statement to that effect as is required by § 1070.17.

(d) *Perfected requests; effect of request deficiencies.* For purposes of computing its deadline to respond to a request, the CFPB will deem itself to have received a request only if, and on the date that, it receives a request that contains substantially all of the information required by and that otherwise conforms with paragraphs (b) and (c) of this section. The CFPB need not accept a request, process a request, or be bound by any deadlines in this subpart for processing a request that fails to conform, in any material respect, to the requirements of paragraphs (b) and (c) of this section. If a request is deficient in any material respect, then the CFPB may return it to the requester and if it does so, it shall advise the requester in what respect the request is deficient, and what additional information is needed to respond to the request. The requester may then amend or resubmit the request. A determination by the CFPB that a request is deficient in any respect is not a denial of a request for records and such determinations are not subject to appeal. If a requester fails to respond to a CFPB notification that a request is deficient within thirty (30) days of the CFPB's notification, the CFPB will deem the request withdrawn.

(e) *Requests by an individual for CFPB records pertaining to that individual.* An individual who wishes to inspect or obtain copies of records of the Bureau that pertain to that individual shall file a request in accordance with subpart E of these rules.

(f) *Requests for CFPB records pertaining to another individual.* Where a request for records pertains to a third party, a requester may receive greater access by submitting either a notarized authorization signed by that individual or a declaration by that individual made in compliance with the requirements set forth in 28 U.S.C. 1746 authorizing disclosure of the records to the requester, or submits proof that the individual is deceased (*e.g.*, a copy of a death certificate or an obituary). The CFPB may require a requester to supply additional information if necessary in order to verify that a particular individual has consented to disclosure.

§ 1070.15 Responsibility for responding to requests for CFPB records.

(a) *In general.* In determining which records are responsive to a request, the CFPB ordinarily will include only records in its possession as of the date the CFPB begins its search for them. If any other date is used, the CFPB shall inform the requester of that date.

(b) *Authority to grant or deny requests.* The Chief FOIA Officer shall be authorized to grant or deny any request for a record of the CFPB.

(c) *Consultations and referrals.* (1) When a requested record has been created by an agency other than the CFPB, the CFPB shall refer the record to the originating agency for a direct response to the requester.

(2) When a FOIA request is received for a record created by the CFPB that includes information originated by another agency, the CFPB shall consult the originating agency for review and recommendation on disclosure. The CFPB shall not release any such records without prior consultation with the originating agency.

(d) *Notice of referral.* Whenever the CFPB refers all or any part of the responsibility for responding to a request to another agency, it will notify the requester of the referral and inform the requester of the name of each agency to which the request has been referred, in whole or in part.

§ 1070.16 Timing of responses to requests for CFPB records.

(a) *In general.* Except as set forth in paragraphs (b) through (d) of this section, and § 1070.17, the CFPB shall respond to requests according to their order of receipt.

(b) *Multitrack processing.* (1) The CFPB may establish separate tracks to process simple and complex requests. The CFPB may assign a request to the simple or complex track(s) based on the amount of work and/or time needed to process the request. The CFPB shall process requests in each track based on the date the request was perfected in accordance with § 1070.14(d).

(2) The CFPB may provide a requester in its complex track with an opportunity to limit the scope of the request to qualify for faster processing within the specified limits of the simple track(s).

(c) *Time period for responding to requests for records.* Ordinarily, the CFPB shall have twenty (20) business days from when a request is received by the CFPB to determine whether to grant or deny a request for records. The twenty (20) business day time period set forth in this paragraph shall not be tolled by the CFPB except that the CFPB may:

(1) Make one reasonable demand to the requester for clarifying information about the request and toll the twenty (20) business day time period while it awaits the clarifying information; or

(2) Toll the twenty (20) business day time period while it awaits clarification from or addresses any dispute with the requester regarding the assessment of fees.

(d) *Unusual circumstances.* (1) Where the CFPB determines that due to unusual circumstances it cannot respond either to a request within the time period set forth in paragraph (c) of this section or to an appeal within the time period set forth in § 1070.21, the CFPB may extend the applicable time periods by informing the requester in writing of the unusual circumstances and of the date by which the CFPB expects to complete its processing of the request or appeal. Any extension or extensions of time with respect to a request or an appeal shall not cumulatively total more than ten (10) business days. However, if the CFPB determines that it needs additional time beyond a ten (10) business day extension to process the request or appeal, then the CFPB shall notify the requester and provide the requester with an opportunity to limit the scope of the request or appeal or to arrange for an alternative time frame for processing the request or appeal or a modified request or appeal. The requester shall retain the right to define the desired scope of the request or appeal, as long as it meets the requirements contained in this subpart.

(2) As used in this paragraph, "unusual circumstances" means:

(i) The need to search for and collect the requested records from field facilities or other establishments that are separate from the office processing the request;

(ii) The need to search for, collect, and appropriately examine a voluminous amount of separate and distinct records which are demanded in a single request; or

(iii) The need for consultation, which shall be conducted with all practicable speed, with another Agency having a substantial interest in the determination of the request, or among two or more CFPB offices having substantial subject matter interest therein.

§ 1070.17 Requests for expedited processing.

(a) *In general.* The CFPB shall process a request on an expedited basis whenever a requester demonstrates a compelling need for expedited processing in accordance with the requirements of this paragraph or in other cases that the CFPB deems appropriate.

(b) *Form and content of a request for expedited processing.* A request for expedited processing shall be made as follows:

(1) A request for expedited processing shall be made in writing and submitted as part of a request for records in accordance with § 1070.14(b). When a request for records includes a request for expedited processing, the request shall be labeled "Expedited Processing Requested."

(2) A request for expedited processing shall contain a statement that demonstrates a compelling need for the requester to obtain expedited processing of the requested records. A "compelling need" is defined as follows:

(i) Failure to obtain the requested records on an expedited basis could reasonably be expected to pose an imminent threat to the life or physical safety of an individual. The requester shall fully explain the circumstances warranting such an expected threat so that the CFPB may make a reasoned determination that a delay in obtaining the requested records could pose such a threat; or

(ii) With respect to a request made by a person primarily engaged in disseminating information, urgency to inform the public concerning actual or alleged Federal government activity. A person "primarily engaged in disseminating information" does not include individuals who are engaged only incidentally in the dissemination of information. The standard of "urgency to inform" requires that the records requested pertain to a matter of current exigency to the American public and that delaying a response to a request for records would compromise a significant recognized interest to and throughout the American general public. The requester must adequately explain the matter or activity and why the records sought are necessary to be provided on an expedited basis.

(3) The requester shall certify the written statement that purports to demonstrate a compelling need for expedited processing to be true and correct to the best of the requester's knowledge and belief. The certification must be in the form prescribed by 28 U.S.C. 1746: "I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief. Executed on [date]." The requester shall mail or submit electronically a copy of such written certification to the Chief FOIA Officer as set forth in § 1070.14(b). The CFPB may waive this certification requirement in appropriate circumstances.

(c) *Determinations of requests for expedited processing.* Within ten (10) calendar days of its receipt of a request for expedited processing, the CFPB shall decide whether to grant it and shall notify the requester of the determination in writing.

(d) *Effect of granting requests for expedited processing.* If the CFPB grants a request for expedited processing, then the CFPB shall give the expedited request priority over non-expedited requests and shall process the expedited request as soon as practicable. The CFPB may assign expedited requests to their own simple and complex processing tracks based upon the amount of work and/or time needed to process them. Within each such track, an expedited request shall be processed in the order of its receipt.

(e) *Appeals of denials of requests for expedited processing.* If the CFPB denies a request for expedited processing, then the requester shall have the right to submit an appeal of the denial determination in accordance with § 1070.21. The CFPB shall communicate this appeal right as part of its written notification to the requester denying expedited processing. The requester shall label its appeal request "Appeal for Expedited Processing." The CFPB shall act expeditiously upon an appeal of a denial of a request for expedited processing.

§ 1070.18 Responses to requests for CFPB records.

(a) *Acknowledgements of requests.* Upon receipt of a perfected request, the CFPB will assign to the request a unique tracking number. The CFPB will send an acknowledgement letter to the requester by mail or email within ten (10) calendar days of receipt of the request. The acknowledgment letter will contain the following information:

(1) The applicable request tracking number;

(2) The date of receipt of the request, as determined in accordance with section 1070.14(d), as well as the date when the requester may expect a response;

(3) A brief statement identifying the subject matter of the request; and

(4) A confirmation, with respect to any fees that may apply to the request pursuant to § 1070.22, that the requester has sought a waiver or reduction in such fees, has agreed to pay any and all applicable fees, or has specified an upper limit that the requester is willing to pay in fees to process the request.

(b) *Initial determination to grant or deny a request.* (1) The officer designated in § 1070.15(b) to this subpart, or his or her delegate, shall make initial determinations either to grant or to deny in whole or in part requests for records.

(2) If the request is granted in full or in part, and if the requester requests a copy of the records requested, then a copy of the records shall be mailed or emailed to the requester in the requested format, to the extent the records are readily producible in the requested format. The CFPB shall also send the requester a statement of the applicable fees, either at the time of the determination or shortly thereafter.

(3) In the case of a request for inspection, the requester shall be notified in writing of the determination, when and where the requested records may be inspected, and of the fees incurred in complying with the request. The CFPB shall then promptly make the records available for inspection at the time and place stated, in a manner that will not interfere with CFPB's operations and will not exclude other persons from making inspections. The requester shall not be permitted to remove the records from the room where inspection is made. If, after making inspection, the requester desires copies of all or a portion of the requested records, copies shall be furnished upon payment of the established fees prescribed by § 1070.22. Fees may be charged for search and review time as stated in § 1070.22.

(4) If it is determined that the request for records should be denied in whole or in part, the requester shall be notified by mail or by email. The letter of notification shall:

(i) State the exemptions relied upon in denying the request;

(ii) If technically feasible, indicate the amount of information deleted and the exemptions under which the deletion is made at the place in the record where such deletion is made (unless providing such indication would harm an interest protected by the exemption relied upon to deny such material);

(iii) Set forth the name and title or position of the responsible official;

(iv) Advise the requester of the right to seek dispute resolution services from the Bureau's FOIA Public Liaison or the Office of Governmental Information Services;

(v) Advise the requester of the right to administrative appeal in accordance with § 1070.21; and

(vi) Specify the official or office to which such appeal shall be submitted.

(5) If it is determined, after a reasonable search for records, that no responsive records have been found to exist, the requester shall be notified in writing or by email. The notification shall also advise the requester of the right to administratively appeal the CFPB's determination that no responsive records exist (*i.e.*, to challenge the adequacy of the CFPB's search for responsive records) in accordance with § 1070.21. The response shall specify the official or office to which the appeal shall be submitted for review.

(c) *Resolution of disputes.* The CFPB is committed to efficiently resolving disputes during the request process. The following resources are available to requesters to resolve any disputes that may arise during the request process:

(1) *FOIA Public Liaison.* Any request related questions or concerns should be directed to the FOIA Public Liaison, who is responsible for reducing delays, increasing transparency and understanding of the status of requests, and assisting in the resolution of disputes.

(2) *Mediation.* The National Archives and Records Administration (NARA), Office of Government Information Services (OGIS) offers non-compulsory, non-binding mediation services to help resolve FOIA disputes. A requester may contact OGIS directly at Office of Government Information Services, National Archives and Records Administration, Room 2510, 8601 Adelphi Road, College Park, MD 20740–6001, Email: *ogis@nara.gov,* Phone: (301) 837–1996, Fax: (301) 837–0348. This information is provided as a public service only. By providing this information, the CFPB does not commit to refer disputes to OGIS, or to defer to OGIS mediation decisions in particular cases.

(d) *Format of records disclosed.* (1) The CFPB will provide records in the requested format if the records can readily be reproduced from the original file to that specific format.

(2) The CFPB may charge fees associated with converting records or files into the requested format in accordance with § 1070.22.

§ 1070.19 Classified information.

Whenever a request is made for a record containing information that another agency has classified, or which may be appropriate for classification by another agency under Executive Order 13526 or any other executive order concerning the classification of information, the CFPB shall refer the responsibility for responding to the request to the classifying or originating agency, as appropriate.

§ 1070.20 Requests for business information provided to the CFPB.

(a) *In general.* Business information provided to the CFPB by a business submitter shall not be disclosed pursuant to a FOIA request except in accordance with this section.

(b) *Definitions.* For purposes of this section:

(1) *Business information* means commercial or financial information obtained by the CFPB from a submitter that may be protected from disclosure under Exemption 4 of the FOIA, 5 U.S.C. 552(b)(4).

(2) *Submitter* means any person from whom the CFPB obtains business information, directly or indirectly. The term includes, without limitation, corporations, State, local, and tribal governments, and foreign governments.

(c) *Designation of business information.* A submitter of business information will use good-faith efforts to designate, by appropriate markings, either at the time of submission or at a reasonable time thereafter, any portions of its submission that it considers to be protected from disclosure under Exemption 4 of the FOIA. These designations will expire ten (10) years after the date of the submission unless the submitter requests otherwise and provides justification for, a longer designation period.

(d) *Notice to submitters.* The CFPB shall provide a submitter with prompt written notice of receipt of a request or appeal encompassing its business information whenever required in accordance with paragraph (e) of this section. Such written notice shall either describe the exact nature of the business information requested or provide copies of the records or portions of records containing the business information. When notification of a voluminous number of submitters is required, notification may be made by posting or publishing the notice in a place reasonably likely to accomplish it.

(e) *When notice is required.* (1) The CFPB shall provide a submitter with notice of receipt of a request or appeal whenever:

(i) The information has been designated in good faith by the submitter as information considered protected from disclosure under Exemption 4; or

(ii) The CFPB has reason to believe that the information may be protected from disclosure under Exemption 4.

(2) The notice requirements of this paragraph shall not apply if:

(i) The CFPB determines that the information is exempt under the FOIA;

(ii) The information lawfully has been published or otherwise made available to the public;

(iii) Disclosure of the information is required by statute (other than the FOIA) or by a regulation issued in accordance with the requirements of Executive Order 12600 (3 CFR, 1988 Comp., p. 235); or

(iv) The designation made by the submitter under paragraph (e)(1)(i) of this section appears obviously frivolous, except that, in such a case, the CFPB shall, within a reasonable time prior to a specified disclosure date, give the submitter written notice of any final decision to disclose the information.

(f) *Opportunity to object to disclosure before release.* (1) Through the notice described in paragraph (d) of this section, the CFPB shall delay any release in order to afford a submitter ten (10) business days from the date of the notice to provide the CFPB with a detailed statement of any objection to disclosure. Such statement shall specify all grounds for withholding any of the information under any exemption of the FOIA and, in the case of Exemption 4, shall demonstrate why the information is considered to be a trade secret or commercial or financial information that is privileged or confidential. In the event that a submitter fails to respond to the notice within the time specified in it, the submitter shall be considered to have no objection to disclosure of the information. Information provided by a submitter pursuant to this paragraph may itself be subject to disclosure under the FOIA.

(2) When notice is given to a submitter under this section, the requester shall be advised that such notice has been given to the submitter. The requester shall be further advised that a delay in responding to the request may be considered a denial of access to records and that the requester may proceed with an administrative appeal or seek judicial review, if appropriate. However, the requester will be invited to agree to a voluntary extension of time so that the CFPB may review the submitter's objection to disclose, if any.

(g) *Notice of intent to disclose.* The CFPB shall consider a submitter's objections and specific grounds for nondisclosure prior to determining whether to disclose business information. Whenever the CFPB decides to disclose business information over the objection of a submitter, the CFPB shall forward to the submitter a written notice which shall include:

(1) A statement of the reasons for which the submitter's disclosure objections were not sustained;

(2) A description of the business information to be disclosed; and

(3) A specified disclosure date which is not less than ten (10) business days after the notice of the final decision to release the requested information has been mailed to the submitter. Except as otherwise prohibited by law, a copy of the disclosure notice shall be forwarded to the requester at the same time.

(h) *Notice to submitter of FOIA lawsuit.* Whenever a requester brings suit seeking to compel disclosure of business information, the CFPB shall promptly notify the submitter of that business information of the existence of the suit.

(i) *Notice to requester of business information.* The CFPB shall notify a requester whenever it provides the submitter with notice and an opportunity to object to disclosure; whenever it notifies the submitter of its intent to disclose the requested information; and whenever a submitter files a lawsuit to prevent the disclosure of the information.

§ 1070.21 Administrative appeals.

(a) *Grounds for administrative appeals.* A requester may appeal an initial determination of the CFPB, including for the following reasons:

(1) To deny access to records in whole or in part (as provided in § 1070.18(b));

(2) To assign a particular fee category to the requestor (as provided in § 1070.22(b));

(3) To deny a request for a reduction or waiver of fees (as provided in § 1070.22(e));

(4) That no records exist that are responsive to the request (as provided in § 1070.18(b)); or

(5) To deny a request for expedited processing (as provided in § 1070.17(e)).

(b) *Time limits for filing administrative appeals.* An appeal, other than an appeal of a denial of expedited processing, must be postmarked or submitted electronically on a date that is within ninety (90) calendar days after the date the initial determination is sent to the requester or the date of the letter transmitting the last records released, whichever is later. An appeal of a denial of expedited processing must be made within ten (10) days of the date of the initial determination letter to deny expedited processing (see § 1070.17).

(c) *Form and content of administrative appeals.* In order to ensure a timely response to an appeal, the appeal shall be made in writing as follows:

(1) If appeal is submitted by mail or delivery service, it shall be addressed to and submitted to the officer specified in paragraph (e) of this section at the address set forth in 1070.14(b). The appeal shall be labeled "Freedom of Information Act Appeal."

(2) If an appeal is submitted by electronic means, it shall be addressed to the officer specified in paragraph (e) of this section and submitted as set forth on the CFPB's Web site, *http://www.consumerfinance.gov.* The appeal shall be labeled "Freedom of Information Act Appeal."

(3) The appeal shall set forth contact information for the requester, including, to the extent available, a mailing address, telephone number, or email address at which the CFPB may contact the requester regarding the appeal; and

(4) The appeal shall specify the applicable request tracking number, the date of the initial request, and the date of the letter of initial determination, and, where possible, enclose a copy of the initial request and the initial determination being appealed.

(d) *Processing of administrative appeals.* The FOIA office will record the date that appeals are received. The receipt of the appeal will be acknowledged by the CFPB and the requester will be advised of the date the appeal was received, the appeal tracking number, and the expected date of response.

(e) *Determinations to grant or deny administrative appeals.* The General Counsel is authorized to and shall decide whether to affirm the initial determination (in whole or in part), to reverse the initial determination (in whole or in part) or to remand the initial determination to the Chief FOIA Officer for further action and shall notify the requester of this decision in writing within twenty (20) business days after the date of receipt of the appeal, unless extended pursuant to § 1070.16(d).

(1) If it is decided that the appeal is to be denied (in whole or in part) the requester shall be:

(i) Notified in writing of the denial;

(ii) Notified of the reasons for the denial, including which of the FOIA exemptions were relied upon;

(iii) Notified of the name and title or position of the official responsible for the determination on appeal;

(iv) Provided with a statement that judicial review of the denial is available in the United States District Court for the judicial district in which the requester resides or has a principal place of business, the judicial district in which the requested records are located, or the District of Columbia in accordance with 5 U.S.C. 552(a)(4)(B); and

(v) Provided with notification that mediation services are available to the requester as a non-exclusive alternative to litigation through the Office of Government Information Services in accordance with 5 U.S.C. 552(h)(3).

(2) If the initial determination is reversed on appeal, the requester shall be so notified and the request shall be processed promptly in accordance with the decision on appeal.

(3) If the initial determination is remanded on appeal to the Chief FOIA Officer for further action, the requester shall be so notified and the request shall be processed in accordance with the decision on appeal. The remanded request shall be treated as a new request received by the CFPB as of the date when the General Counsel transmits the remand notification to the requester. The procedures and deadlines set forth in this subpart for processing, deciding, responding to, and filing administrative appeals of new FOIA requests shall apply to the remanded request.

(f) *Adjudication of administrative appeals of requests in litigation.* An appeal ordinarily will not be adjudicated if the request becomes a matter of FOIA litigation.

§ 1070.22 Fees for processing requests for CFPB records.

(a) *In general.* The CFPB shall determine whether and to what extent to charge a requester fees for processing a FOIA request, for the services and in the amounts set forth in this paragraph, by determining an appropriate fee category for the requester (as set forth in paragraph (b) of this section) and then by charging the requester those fees applicable to the assigned category (as set forth in paragraph (c) of this section), unless circumstances exist (as described in paragraph (d) of this section) that render fees inapplicable or inadvisable or unless the requester has requested and the CFPB has granted a reduction in or waiver of fees (as set forth in paragraph (e) of this section).

(1) The CFPB shall charge a requester fees for the cost of copying or printing records at the rate of $0.10 per page.

(2) The CFPB shall charge a requester for all time spent by its employees searching for records that are responsive to a request. The CFPB shall charge the requester fees for search time as follows:

(i) The CFPB shall charge for search time at the salary rate(s) (basic pay plus sixteen (16) percent) of the employee(s) who conduct the search. However, the CFPB shall charge search fees at the rate of $9.00 per fifteen (15) minutes of search time whenever only administrative/clerical employees conduct a search and at the rate of $23.00 per fifteen (15) minutes of search time whenever only professional/executive employees conduct a search. Search charges shall also include transportation of employees and records necessary to the search at actual cost. Fees may be charged for search time even if the search does not yield any responsive records, or if records are exempt from disclosure.

(ii) The CFPB shall charge the requester for the actual direct costs of conducting an electronic records search, including computer search time, runs, and output. The CFPB shall also charge for time spent by computer operators or programmers (at the rates set forth in paragraph (a)(2)(i) of this section) who conduct or assist in the conduct of an electronic records search.

(3) The CFPB shall charge a requester for time spent by its employees

examining responsive records to determine whether any portions of such record are exempt from disclosure, pursuant to the FOIA exemptions of 5 U.S.C. 552(b). The CFPB shall also charge a requester for time spent by its employees redacting any such exempt information from a record and preparing a record for release to the requester. The CFPB shall charge a requester for time spent reviewing records at the salary rate(s) (*i.e.,* basic pay plus sixteen (16) percent) of the employees who conduct the review. However, the CFPB shall charge review fees at the rate of $9.00 per fifteen (15) minutes of search time whenever only administrative/clerical employees review records and at the rate of $23.00 per fifteen (15) minutes of search time whenever only professional/executive employees review records. Fees shall be charged for review time even if records ultimately are not disclosed.

(4) Fees for all services provided shall be charged whether or not copies are made available to the requester for inspection. However, no fee shall be charged for monitoring a requester's inspection of records.

(5) Other services and materials requested which are not covered by this part nor required by the FOIA are chargeable at the actual cost to the CFPB. This includes, but is not limited to:

(i) Certifying that records are true copies; or

(ii) Sending records by special methods such as express mail, etc.

(b) *Categories of requesters.* (1) For purposes of assessing fees as set forth in this section, each requester shall be assigned to one of the following categories:

(i) *Commercial user* refers to one who seeks information for a use or purpose that furthers the commercial, trade, or profit interests of the requester or the person on whose behalf the request is made, which can include furthering those interests through litigation. The CFPB's decision to place a requester in the commercial use category will be made on a case-by-case basis based on how the requester will use the information.

(ii) *Educational institution* refers to a preschool, a public or private elementary or secondary school, an institution of graduate higher education, an institution of undergraduate higher education, an institution of professional education, and an institution of vocational education, which operates a program or programs of scholarly research.

(iii) *Non-commercial scientific institution* refers to an institution that is not operated on a "commercial user" basis as that term is defined in paragraph (b)(2)(i) of this section, and which is operated solely for the purpose of conducting scientific research, the results of which are not intended to promote any particular product or industry.

(iv) *Representative of the news media* refers to any person or entity that gathers information of potential interest to a segment of the public, uses its editorial skills to turn the raw materials into a distinct work, and distributes that work to an audience. In this paragraph, the term 'news' means information that is about current events or that would be of current interest to the public. Examples of news-media entities are television or radio stations broadcasting to the public at large and publishers of periodicals (but only if such entities qualify as disseminators of 'news') who make their products available for purchase by or subscription by or free distribution to the general public. Other examples of news media entities include online publications and Web sites that regularly deliver news content to the public. These examples are not all-inclusive. Moreover, as methods of news delivery evolve (for example, the adoption of the electronic dissemination of newspapers through telecommunications services), such alternative media shall be considered to be news-media entities. A freelance journalist shall be regarded as working for a news-media entity if the journalist can demonstrate a solid basis for expecting publication through that entity, whether or not the journalist is actually employed by the entity. A publication contract would present a solid basis for such an expectation; the CFPB may also consider the past publication record of the requester in making such a determination.

(v) *"Other" requester* refers to a requester who does not fall within any of the previously described categories.

(2) Within twenty (20) calendar days of its receipt of a request, the CFPB shall make a determination as to the proper fee category to apply to a requester. The CFPB shall inform the requester of the determination in the request acknowledgment letter, or if no such letter is required, in another writing. Where the CFPB has reasonable cause to doubt the use to which a requester will put the records sought, or where that use is not clear from the request itself, the CFPB should seek additional clarification before assigning the request to a specific category.

(3) If the CFPB assigns to a requester a fee category, then the requester shall have the right to submit an appeal of the CFPB's determination in accordance with § 1070.21. The CFPB shall communicate this appeal right as part of its written notification to the requester of an adverse fee category determination. The requester shall label its appeal request "Appeal of Fee Category Determination."

(c) *Fees applicable to each category of requester.* The following fee schedule applies uniformly throughout the CFPB to requests processed under the FOIA. Specific levels of fees are prescribed for each category of requester defined in paragraph (b) of this section.

(1) Commercial users shall be charged the full direct costs of searching for, reviewing, and duplicating the records they request. Moreover, when a request is received for disclosure that is primarily in the commercial interest of the requester, the CFPB is not required to consider a request for a waiver or reduction of fees based upon the assertion that disclosure would be in the public interest. The CFPB may recover the cost of searching for and reviewing records even if there is ultimately no disclosure of records or no records are located.

(2) Educational and non-commercial scientific institution requesters shall be charged only for the cost of duplicating the records they request, except that the CFPB shall provide the first one hundred (100) pages of duplication free of charge. To be eligible, requesters must show that the request is made under the auspices of a qualifying institution and that the records are not sought for a commercial use, but are sought in furtherance of scholarly (if the request is from an educational institution) or scientific (if the request is from a non-commercial scientific institution) research. These categories do not include requesters who want records for use in meeting individual academic research or study requirements.

(3) Representatives of the news media shall be charged only for the cost of duplicating the records they request, except that the CFPB shall provide them with the first one hundred (100) pages of duplication free of charge.

(4) Other requesters who do not fit any of the categories described above shall be charged the full direct cost of searching for and duplicating records that are responsive to the request, except that the CFPB shall provide the first one hundred (100) pages of duplication and the first two hours of search time free of charge. The CFPB may recover the cost of searching for records even if there is ultimately no disclosure of records, or no records are located. Requests from persons for

records about themselves filed in the CFPB's systems of records shall continue to be treated under the fee provisions of the Privacy Act of 1974, 5 U.S.C. 552a, which permit fees only for duplication, after the first one hundred (100) pages are furnished free of charge.

(d) *Other circumstances when fees are not charged.* Notwithstanding paragraphs (b) and (c) of this section, the CFPB may not charge a requester a fee for processing a FOIA request if any of the following applies:

(1) The cost of collecting a fee would be equal to or greater than the fee itself;

(2) The fee is less than $250, excluding duplication costs;

(3) The fees were waived or reduced in accordance with paragraph (e) of this section;

(4) If the CFPB fails to comply with any time limit under § 1070.15 or § 1070.21, then the CFPB shall not assess search fees, or if the requester is a representative of the news media or an educational or noncommercial scientific institution, then the CFPB shall not assess duplication fees, unless the CFPB has:

(i) Determined that unusual circumstances apply to the processing of the request;

(ii) Provided timely written notice to the requester of the unusual circumstances in accordance with § 1070.16(d);

(iii) Determined that more than 5,000 pages are necessary to respond to the request; and

(iv) Discussed with the requester via mail, email, or telephone (or made not less than three good-faith attempts to do so) how the requester could effectively limit the scope of the request.

(5) If the CFPB determines, as a matter of administrative discretion, that waiving or reducing the fees would serve the interest of the United States Government.

(e) *Waiver or reduction of fees.* (1) A requester shall be entitled to receive from the CFPB a waiver or reduction in the fees otherwise applicable to a FOIA request whenever the requester:

(i) Requests such waiver or reduction of fees in writing as part of the FOIA request;

(ii) Labels the request for waiver or reduction of fees "Fee Waiver or Reduction Requested" on the FOIA request; and

(iii) Demonstrates that the fee reduction or waiver request that a waiver or reduction of the fees is in the public interest because:

(A) Furnishing the information is likely to contribute significantly to public understanding of the operations or activities of the government; and

(B) Furnishing the information is not primarily in the commercial interest of the requester.

(2) To determine whether the requester has satisfied the requirements of paragraph (e)(1)(iii)(A), the CFPB shall consider the following factors:

(i) The subject of the requested records must concern identifiable operations or activities of the Federal government, with a connection that is direct and clear, and not remote or attenuated.

(ii) The disclosable portions of the requested records must be meaningfully informative about government operations or activities in order to be "likely to contribute" to an increased public understanding of those operations or activities. The disclosure of information that already is in the public domain, in either a duplicative or a substantially similar form, is not as likely to contribute to the public's understanding.

(iii) The disclosure must contribute to the understanding of a reasonably broad audience of persons interested in the subject, as opposed to the individual understanding of the requester. A requester's expertise in the subject area and ability and intention to effectively convey information to the public shall be considered. It shall be presumed that a representative of the news media will satisfy this consideration.

(iv) The public's understanding of the subject in question, as compared to the level of public understanding existing prior to the disclosure, must be enhanced by the disclosure to a significant extent.

(3) To determine whether the requester has satisfied the requirements of paragraph (e)(1)(iii)(B), the CFPB shall consider the following factors:

(i) The CFPB shall consider any commercial interest of the requester (with reference to the definition of "commercial user" in (b)(1)(i) of this section), or of any person on whose behalf the requester may be acting, that would be furthered by the requested disclosure. Requesters shall be given an opportunity in the administrative process to provide explanatory information regarding this consideration.

(ii) A fee waiver or reduction is justified where the public interest standard is satisfied and that public interest is greater in magnitude than that of any identified commercial interest in disclosure. The CFPB ordinarily shall presume that where a news media requester has satisfied the public interest standard, the public interest will be the interest primarily served by disclosure to that requester. Disclosure to data brokers or others who merely compile and market government information for direct economic return shall not be presumed to primarily serve the public interest.

(4) Where only some of the records to be released satisfy the requirements for a waiver of fees, a waiver shall be granted for those records.

(5) If the CFPB denies a request to reduce or waive fees, then the CFPB shall advise the requester, in the denial notification letter, that the requester may incur fees if the CFPB proceeds to process the request. The notification letter shall also advise the requester that the CFPB will not proceed to process the request further unless the requester, in writing, directs the CFPB to do so and either agrees to pay any fees that may apply to processing the request or specifies an upper limit that the requester is willing to pay to process the request. If the CFPB does not receive this written direction and agreement/specification within thirty (30) calendar days of the date of the denial notification letter, then the CFPB shall deem the request to be withdrawn.

(6) If the CFPB denies a request to reduce or waive fees, then the requester shall have the right to submit an appeal of the denial determination in accordance with § 1070.21. The CFPB shall communicate this appeal right as part of its written notification to the requester denying the fee reduction or waiver request. The requester should label its appeal request "Appeal for Fee Reduction/Waiver."

(f) *Advance notice and prepayment of fees.* (1) The CFPB shall notify a requester of the estimated fees for processing a request and provide a breakdown of the fees attributable to search, review, and duplication, when the estimated fees are $250 or more and:

(i) The fees exceed the limit set by the requester;

(ii) The requester did not specify a limit; or

(iii) The CFPB has denied a request for a reduction or waiver of fees.

The requester must provide an agreement to pay the estimated fees; however, the requester shall also be given an opportunity to reformulate the request in an attempt to reduce fees.

(2) If the fees are estimated to exceed $1000, the requester must pre-pay such amount prior to the processing of the request, or provide satisfactory assurance of full payment if the requester has a history of prompt payment of FOIA fees. The requester shall also be given an opportunity to reformulate the request in such a way as to lower the applicable fees.

(3) The CFPB reserves the right to request prepayment after a request is processed and before documents are released.

(4) If a requester has previously failed to pay a fee within thirty (30) calendar days of the date of the billing, the requester shall be required to pay the full amount owed plus any applicable interest and to make an advance payment of the full amount of the estimated fee before the CFPB begins to process a new request or the pending request.

(5) When the CFPB acts under paragraphs (f)(1) through (4) of this section, the statutory time limits of twenty (20) days (excluding Saturdays, Sundays, and legal public holidays) from receipt of initial requests or appeals, plus extensions of these time limits, shall begin only after fees have been paid, a written agreement to pay fees has been provided, or a request has been reformulated.

(g) *Form of payment.* Payment may be tendered as set forth on the CFPB's Web site, *http://www.consumerfinance.gov.*

(h) *Charging interest.* The CFPB may charge interest on any unpaid bill starting on the 31st day following the date of billing the requester. Interest charges will be assessed at the rate provided in 31 U.S.C. 3717 and will accrue from the date of the billing until payment is received by the CFPB. The CFPB will follow the provisions of the Debt Collection Act of 1982 (Pub. L. 97–365, 96 Stat. 1749), as amended, and its administrative procedures, including the use of consumer reporting agencies, collection agencies, and offset.

(i) *Aggregating requests.* Where the CFPB reasonably believes that a requester or a group of requesters acting together is attempting to divide a request into a series of requests for the purpose of avoiding fees, the CFPB may aggregate those requests and charge accordingly. The CFPB may presume that multiple requests of this type made within a thirty (30) day period have been made in order to avoid fees. Where requests are separated by a longer period, the CFPB will aggregate them only where there exists a solid basis for determining that aggregation is warranted under all the circumstances involved. Multiple requests involving unrelated matters will not be aggregated.

§ 1070.23 Authority and responsibilities of the Chief FOIA Officer.

(a) *Chief FOIA Officer.* The Director authorizes the Chief FOIA Officer to act upon all requests for agency records, with the exception of determining appeals from the initial determinations of the Chief FOIA Officer, which will be decided by the General Counsel. The Chief FOIA officer shall, subject to the authority of the Director:

(1) Have CFPB-wide responsibility for efficient and appropriate compliance with the FOIA;

(2) Monitor implementation of the FOIA throughout the CFPB and keep the Director, the General Counsel, and the Attorney General appropriately informed of the CFPB's performance in implementing the FOIA;

(3) Recommend to the Director such adjustments to agency practices, policies, personnel and funding as may be necessary to improve the Chief FOIA Officer's implementation of the FOIA;

(4) Review and report to the Attorney General, through the Director, at such times and in such formats as the Attorney General may direct, on the CFPB's performance in implementing the FOIA;

(5) Facilitate public understanding of the purposes of the statutory exemptions of the FOIA by including concise descriptions of the exemptions in both the CFPB's handbook and the CFPB's annual report on the FOIA, and by providing an overview, where appropriate, of certain general categories of CFPB records to which those exemptions apply;

(6) Designate one or more FOIA Public Liaisons;

(7) Offer Training to Bureau staff regarding their responsibilities under the FOIA;

(8) Serve as the primary Bureau liaison with the Office of Government Information Services and the Office of Information Policy; and

(9) Maintain and update, as necessary and in accordance with the requirements of this subpart, the CFPB's FOIA Web site, including its e-FOIA Library.

(b) *FOIA Public Liaisons.* FOIA Public Liaisons shall report to the Chief FOIA Officer and shall serve as supervisory officials to whom a requester can raise concerns about the service the requester has received from the CFPB's FOIA office, following an initial response from the FOIA office staff. FOIA Public Liaisons shall be responsible for assisting in reducing delays, increasing transparency and understanding of the status of requests, and assisting in the resolution of disputes.

Subpart C—Disclosure of CFPB Information in Connection with Legal Proceedings

§ 1070.30 Purpose and scope; definitions.

(a) This subpart sets forth the procedures to be followed with respect to subpoenas, court orders, or other requests or demands for any CFPB information, whether contained in the files of the CFPB or acquired by a CFPB employee as part of the performance of that employee's duties or by virtue of employee's official status.

(b) This subpart does not apply to requests for official information made pursuant to subparts B, D, and E of this part.

(c) This subpart does not apply to requests for information made in the course of adjudicating claims against the CFPB by CFPB employees (present or former) or applicants for CFPB employment for which jurisdiction resides with the U.S. Equal Employment Opportunity Commission, the U.S. Merit Systems Protection Board, the Office of Special Counsel, the Federal Labor Relations Authority, or their successor agencies, or a labor arbitrator operating under a collective bargaining agreement between the CFPB and a labor organization representing CFPB employees.

(d) This subpart is intended only to inform the public about CFPB procedures concerning the service of process and responses to subpoenas, summons, or other demands or requests for official information or action and is not intended to and does not create, and may not be relied upon to create any right or benefit, substantive or procedural, enforceable at law by a party against the CFPB or the United States.

(e) For purposes of this subpart:

(1) *Demand* means a subpoena or order for official information, whether contained in CFPB records or through testimony, related to or for possible use in a legal proceeding.

(2) *Legal proceeding* encompasses all pre-trial, trial, and post-trial stages of all judicial or administrative actions, hearings, investigations, or similar proceedings before courts, commissions, boards, grand juries, arbitrators, or other judicial or quasi-judicial bodies or tribunals, whether criminal, civil, or administrative in nature, and whether foreign or domestic. This phrase includes all stages of discovery as well as formal or informal requests by attorneys, their agents, or others involved in legal proceedings.

(3) *Official Information* means all information of any kind, however stored, that is in the custody and control of the CFPB or was acquired by CFPB employees, or former employees as part of their official duties or because of their official status while such individuals were employed by or served on behalf of the CFPB. Official information also includes any information acquired by CFPB employees or former employees

while such individuals were engaged in matters related to consumer financial protection functions prior to the employees' transfer to the CFPB pursuant to Subtitle F of the Consumer Financial Protection Act of 2010.

(4) *Request* means any request for official information in the form of testimony, affidavits, declarations, admissions, responses to interrogatories, document production, inspections, or formal or informal interviews, during the course of a legal proceeding, including pursuant to the Federal Rules of Civil Procedure, the Federal Rules of Criminal Procedure, or other applicable rules of procedure.

(5) *Testimony* means a statement in any form, including personal appearances before a court or other legal tribunal, interviews, depositions, telephonic, televised, or videographed statements or any responses given during discovery or similar proceeding in the course of litigation.

§ 1070.31 Service of subpoenas, court orders, and other demands for CFPB information or action.

(a) Except in cases in which the CFPB is represented by legal counsel who have entered an appearance or otherwise given notice of their representation, only the General Counsel is authorized to receive and accept subpoenas or other demands or requests directed to the CFPB or its employees, whether civil or criminal in nature, for:

(1) Records of the CFPB;

(2) Official information including, but not limited to, testimony, affidavits, declarations, admissions, responses to interrogatories, or informal statements, relating to material contained in the files of the CFPB or which any CFPB employee acquired in the course and scope of the performance of his or her official duties;

(3) Garnishment or attachment of compensation of current or former employees; or

(4) The performance or non-performance of any official CFPB duty.

(b) Documents described in paragraph (a) of this section should be served upon the General Counsel, Consumer Financial Protection Bureau, 1700 G Street NW., Washington, DC 20552. Service must be effected as provided in applicable rules and regulations governing service in Federal judicial and administrative proceedings. Acceptance of such documents by the General Counsel does not constitute a waiver of any defense that might otherwise exist with respect to service under the Federal Rules of Civil or Criminal Procedure or other applicable laws or regulations.

(c) In the event that any demand or request described in paragraph (a) of this section is sought to be delivered to a CFPB employee other than in the manner prescribed in paragraph (b) of this section, such employee shall decline service and direct the server of process to these regulations. If the demand or request is nonetheless delivered to the employee, the employee shall immediately notify, and deliver a copy of that document to, the General Counsel.

(d) The CFPB is not an agent for service for, or otherwise authorized to accept on behalf of its employees, any subpoenas, orders, or other demands or requests, which are not related to the employees' official duties.

(e) Copies of any subpoenas, orders, or other demands or requests that are directed to former employees of the CFPB in connection with the performance of official CFPB duties shall also be served upon the General Counsel. The CFPB shall not, however, serve as an agent for service for the former employee, nor is the CFPB otherwise authorized to accept service on behalf of its former employees. If the demand involves their official duties as CFPB employees, former employees who receive subpoenas, orders, or similar compulsory process should also notify, and deliver a copy of the document to, the General Counsel.

§ 1070.32 Testimony and production of documents prohibited unless approved by the General Counsel.

(a) Unless authorized by the General Counsel, no employee or former employee of the CFPB shall, in response to a demand or a request provide oral or written testimony by deposition, declaration, affidavit, or otherwise concerning any official information.

(b) Unless authorized by the General Counsel, no employee or former employee shall, in response to a demand or request, produce any document or any material acquired as part of the performance of that employee's duties or by virtue of that employee's official status.

§ 1070.33 Procedure when testimony or production of documents is sought; general.

(a) If, as part of a proceeding in which the United States or the CFPB is not a party, official information is sought through a demand for testimony, CFPB records, or other material, the party seeking such information must (except as otherwise required by Federal law or authorized by the General Counsel) set forth in writing:

(1) The title and forum of the proceeding, if applicable;

(2) A detailed description of the nature and relevance of the official information sought;

(3) A showing that other evidence reasonably suited to the requester's needs is not available from any other source; and

(4) If testimony is requested, the intended use of the testimony, a general summary of the desired testimony, and a showing that no document could be provided and used in lieu of testimony.

(b) To the extent he or she deems necessary or appropriate, the General Counsel may also require from the party seeking such information a plan of all reasonably foreseeable demands, including but not limited to the names of all employees and former employees from whom testimony or discovery will be sought, areas of inquiry, expected duration of proceedings requiring oral testimony, identification of potentially relevant documents, or any other information deemed necessary to make a determination. The purpose of this requirement is to assist the General Counsel in making an informed decision regarding whether testimony, the production of documents, or the provision of other information should be authorized.

(c) The General Counsel may consult or negotiate with an attorney for a party, or the party if not represented by an attorney, to refine or limit a request or demand so that compliance is less burdensome.

(d) The General Counsel will notify the CFPB employee and such other persons as circumstances may warrant of his or her decision regarding compliance with the request or demand.

§ 1070.34 Procedure when response to demand is required prior to receiving instructions.

(a) If a response to a demand described in § 1070.34 is required before the General Counsel renders a decision, the CFPB will request that the appropriate CFPB attorney or an attorney of the Department of Justice, as appropriate, take steps to stay, postpone, or obtain relief from the demand pending decision. If necessary, the attorney will:

(1) Appear with the employee upon whom the demand has been made;

(2) Furnish the court or other authority with a copy of the regulations contained in this subpart;

(3) Inform the court or other authority that the demand has been, or is being, as the case may be, referred for the prompt consideration of the appropriate CFPB official; and

(4) Request the court or authority to stay the demand pending receipt of the requested instructions.

(b) In the event that an immediate demand for production or disclosure is made in circumstances which would preclude the proper designation or appearance of an attorney of the CFPB or the Department of Justice on the employee's behalf, the employee, if necessary, shall request from the demanding court or authority a reasonable stay of proceedings for the purpose of obtaining instructions from the General Counsel.

§ 1070.35 Procedure in the event of an adverse ruling.

If a stay of, or other relief from, the effect of a demand made pursuant to §§ 1070.33 and 1070.34 is declined or not obtained, or if the court or other judicial or quasi-judicial authority declines to stay the effect of the demand made pursuant to §§ 1070.33 and 1070.34, or if the court or other authority rules that the demand must be complied with irrespective of the General Counsel's instructions not to produce the material or disclose the information sought, the employee upon whom the demand has been made shall decline to comply with the demand citing this subpart and *United States ex rel. Touhy* v. *Ragen,* 340 U.S. 462 (1951).

§ 1070.36 Considerations in determining whether the CFPB will comply with a demand or request.

(a) In deciding whether to comply with a demand or request, CFPB officials and attorneys shall consider, among other pertinent considerations:

(1) Whether such compliance would be unduly burdensome or otherwise inappropriate under the applicable rules of discovery or the rules of procedure governing the case or matter in which the demand arose;

(2) Whether the number of similar requests would have a cumulative effect on the expenditure of CFPB resources;

(3) Whether compliance is appropriate under the relevant substantive law concerning privilege or disclosure of information;

(4) The public interest;

(5) The need to conserve the time of CFPB employees for the conduct of official business;

(6) The need to avoid spending time and money of the United States for private purposes;

(7) The need to maintain impartiality between private litigants in cases where a substantial government interest is not implicated;

(8) Whether compliance would have an adverse effect on performance by the CFPB of its mission and duties;

(9) The need to avoid involving the CFPB in controversial issues not related to its mission;

(10) Whether compliance would interfere with supervisory examinations, compromise the CFPB's supervisory functions or programs, or undermine public confidence in supervised financial institutions; and

(11) Whether compliance would interfere with the CFPB's ability to monitor for risks to consumers in the offering or provision of consumer financial products and services.

(b) Among those demands and requests in response to which compliance will not ordinarily be authorized are those with respect to which any of the following factors, inter alia, exist:

(1) Compliance would violate a statute or applicable rule of procedure;

(2) Compliance would violate a specific regulation or Executive order;

(3) Compliance would reveal information properly classified in the interest of national security;

(4) Compliance would reveal confidential or privileged commercial or financial information or trade secrets without the owner's consent;

(5) Compliance would compromise the integrity of the deliberative processes of the CFPB;

(6) Compliance would not be appropriate or necessary under the relevant substantive law governing privilege;

(7) Compliance would reveal confidential information; or

(8) Compliance would interfere with ongoing investigations or enforcement proceedings, compromise constitutional rights, or reveal the identity of a confidential informant.

(c) The CFPB may condition disclosure of official information pursuant to a request or demand on the entry of an appropriate protective order.

§ 1070.37 Prohibition on providing expert or opinion testimony.

(a) Except as provided in this section, and subject to 5 CFR 2635.805, CFPB employees or former employees shall not provide opinion or expert testimony based upon information which they acquired in the scope and performance of their official CFPB duties, except on behalf of the CFPB or the United States or a party represented by the CFPB, or the Department of Justice, as appropriate.

(b) Any expert or opinion testimony by a former employee of the CFPB shall be excepted from paragraph (a) of this section where the testimony involves only general expertise gained while employed at the CFPB.

(c) Upon a showing by the requestor of exceptional need or unique circumstances and that the anticipated testimony will not be adverse to the interests of the United States, the General Counsel may, consistent with 5 CFR 2635.805, exercise his or her discretion to grant special, written authorization for CFPB employees, or former employees, to appear and testify as expert witnesses at no expense to the United States.

(d) If, despite the final determination of the General Counsel, a court of competent jurisdiction or other appropriate authority orders the appearance and expert or opinion testimony of a current or former CFPB employee, that person shall immediately inform the General Counsel of such order. If the General Counsel determines that no further legal review of or challenge to the court's order will be made, the CFPB employee, or former employee, shall comply with the order. If so directed by the General Counsel, however, the employee, or former employee, shall decline to testify.

Subpart D—Confidential Information

§ 1070.40 Purpose and scope.

This subpart does not apply to requests for official information made pursuant to subparts B, C, or E of this part.

§ 1070.41 Non-disclosure of confidential information.

(a) *Non-disclosure.* Except as required by law or as provided in this part, no current or former employee or contractor or consultant of the CFPB, or any other person in possession of confidential information, shall disclose such confidential information by any means (including written or oral communications) or in any format (including paper and electronic formats), to:

(1) Any person who is not an employee, contractor, or consultant of the CFPB; or

(2) Any CFPB employee, contractor, or consultant when the disclosure of such confidential information to that employee, contractor, or consultant is not relevant to the performance of the employee's, contractor's, or consultant's assigned duties.

(b) *Disclosures to contractors and consultants.* CFPB contractors or consultants must treat confidential information in accordance with this part, other Federal laws and regulations that apply to Federal agencies for the protection of the confidentiality of personally identifiable information and for data security and integrity, as well as any additional conditions or limitations that the CFPB may impose.

(c) *Disclosure of materials derived from confidential information.* The CFPB may, in its discretion, disclose materials that it derives from or creates using confidential information to the extent that such materials do not identify, either directly or indirectly, any particular person to whom the confidential information pertains.

(d) *Disclosure of confidential information with consent.* Where practicable, the CFPB may, in its discretion and in accordance with applicable law, disclose confidential information that directly or indirectly identifies particular persons if the CFPB obtains prior consent from such persons to make the disclosure.

(e) *Nondisclosure of confidential information provided to the CFPB by other agencies.* Nothing in this subpart requires or authorizes the CFPB to disclose confidential information that another agency has provided to the CFPB to the extent that such disclosure contravenes applicable law or the terms of any agreement that exists between the CFPB and the agency to govern the CFPB's treatment of information that the agency provides to the CFPB.

§ 1070.42 Disclosure of confidential supervisory information and confidential investigative information.

(a) *Discretionary disclosure of confidential supervisory information or confidential investigative information by the CFPB.* The CFPB may, in its discretion, and to the extent consistent with applicable law, disclose confidential supervisory information or confidential investigative information concerning a person, its affiliates, or its service providers to that person, its affiliates, or its service providers.

(b) *Disclosure of confidential supervisory information or confidential investigative information by the recipients of the information.* Unless directed otherwise by the Associate Director for Supervision, Enforcement, and Fair Lending:

(1) Any person lawfully in possession of confidential supervisory information or confidential investigative information provided directly to it by the CFPB pursuant to this section may disclose such information, or portions thereof, to its affiliates and to the following individuals to the extent that the disclosure of such confidential supervisory information or confidential investigative information is relevant to the performance of such individuals' assigned duties:

(i) Its directors, officers, trustees, members, general partners, or employees; and

(ii) The directors, officers, trustees, members, general partners, or employees of its affiliates.

(2) Any person lawfully in possession of confidential supervisory information or confidential investigative information provided directly to it by the CFPB pursuant to this section may disclose such information, or portions thereof, to:

(i) Its certified public accountant, legal counsel, contractor, consultant, or service provider;

(ii) Its insurance provider pursuant to a claim made under an existing policy, provided that the Bureau has not precluded indemnification or reimbursement for the claim; information disclosed pursuant to this subparagraph may be used by the insurance provider solely for purposes of administering such a claim; or

(iii) Another person, with the prior written approval of the Associate Director for Supervision, Enforcement, and Fair Lending.

(3) Where a person discloses confidential supervisory information or confidential investigative information pursuant to paragraph (b) of this section:

(i) The recipient of such confidential supervisory information or confidential investigative information shall not, without the prior written approval of the Associate Director for Supervision, Enforcement, and Fair Lending, utilize, make, or retain copies of, or disclose confidential supervisory information or confidential investigative information for any purpose, except as is necessary to provide advice or services to the person or its affiliate; and

(ii) The person disclosing the confidential supervisory information or confidential investigative information shall take reasonable steps to ensure that the recipient complies with paragraph (b)(3)(i) of this section.

§ 1070.43 Disclosure of confidential information to agencies.

(a) *Required disclosure of confidential information to agencies.* The CFPB shall:

(1) Disclose a draft of a report of examination of a supervised financial institution prior to its finalization, in accordance with 12 U.S.C. 5515(e)(1)(C), and disclose a final report of examination, including any and all revisions made to such a report, to a Federal or State agency with jurisdiction over that supervised financial institution, provided that the CFPB receives from the agency reasonable assurances as to the confidentiality of the information disclosed; and

(2) Disclose confidential consumer complaint information to a Federal or State agency to facilitate preparation of reports to Congress required by 12 U.S.C. 5493(b)(3)(C) and to facilitate the CFPB's supervision and enforcement activities and its monitoring of the market for consumer financial products and services, provided that the agency shall first give written assurance to the CFPB that it will maintain such information in confidence, including in a manner that conforms to the standards that apply to Federal agencies for the protection of the confidentiality of personally identifiable information and for data security and integrity.

(b) *Discretionary disclosure of confidential information to agencies.* (1) Upon receipt of a written request that contains the information required by paragraph (b)(2) of this section, the CFPB may, in its discretion, disclose confidential information to an Agency to the extent that the disclosure of the information is relevant to the exercise of the Agency's statutory or regulatory authority.

(2) To obtain access to confidential information pursuant to paragraph (b)(1) of this section, an authorized officer or employee of the agency shall submit a written request to the CFPB's Associate Director for Supervision, Enforcement, and Fair Lending at *accessrequests@cfpb.gov* or at 1700 G Street NW., Washington, DC 20552. The request shall include the following:

(i) A description of the particular information, kinds of information, and where possible, the particular documents to which access is sought;

(ii) A statement of the purpose for which the information will be used;

(iii) A statement certifying and identifying the Agency's statutory or regulatory authority that is relevant to the requested information, as required by paragraph (b)(1) of this section;

(iv) A statement certifying and identifying the agency's legal authority for protecting the requested information from public disclosure; and

(v) A certification that the agency will maintain the requested confidential information in confidence, including in a manner that conforms to the standards that apply to Federal agencies for the protection of the confidentiality of personally identifiable information and for data security and integrity, as well as any additional conditions or limitations that the CFPB may impose.

(c) *Negotiation of standing requests.* The CFPB may negotiate terms governing the exchange of confidential information with Agencies on a standing basis, as appropriate.

§ 1070.44 Disclosure of confidential consumer complaint information.

The CFPB may, to the extent permitted by law, disclose confidential consumer complaint information as it deems necessary to investigate, resolve, or otherwise respond to consumer complaints or inquiries concerning consumer financial products and services or a violation of Federal consumer financial law.

§ 1070.45 Affirmative disclosure of confidential information.

(a) The CFPB may disclose confidential information, in accordance with applicable law, as follows:

(1) To a CFPB employee, as that term is defined in § 1070.2 and in accordance with § 1070.41;

(2) To either House of the Congress or to an appropriate committee or subcommittee of the Congress, as set forth in 12 U.S.C. 5562(d)(2), provided that, upon the receipt by the CFPB of a request from the Congress for confidential information that a financial institution submitted to the CFPB along with a claim that such information consists of a trade secret or privileged or confidential commercial or financial information, or confidential supervisory information, the CFPB may notify the financial institution in writing of its receipt of the request and provide the institution with a copy of the request;

(3) In investigational hearings and witness interviews, or otherwise in the investigation and administration of enforcement actions, as is reasonably necessary, at the discretion of the CFPB;

(4) In or related to an administrative or court proceeding to which the CFPB is a party. In the case of confidential investigative information that contains any trade secret or privileged or confidential commercial or financial information, as claimed by designation by the submitter of such material, or confidential supervisory information, the submitter, or the CFPB, in its discretion, may seek an appropriate order prior to disclosure of such material in a proceeding;

(5) In CFPB personnel matters, as necessary and subject to appropriate protections;

(6) To Agencies in summary form to the extent necessary to confer with such Agencies about matters relevant to the exercise of the Agencies' statutory or regulatory authority; or

(7) As required under any other applicable law.

§ 1070.46 Other disclosures of confidential information.

(a) To the extent permitted by law and as authorized by the Director in writing, the CFPB may disclose confidential information other than as set forth in this subpart.

(b) Prior to disclosing confidential information pursuant to paragraph (a) of this section, the CFPB may, as it deems appropriate under the circumstances, provide written notice to the person to whom the confidential information pertains that the CFPB intends to disclose its confidential information in accordance with this section.

(c) The authority of the Director to disclose confidential information pursuant to paragraph (a) of this section shall not be delegated. However, a person authorized to perform the functions of the Director in accordance with law may exercise the authority of the Director as set forth in this section.

§ 1070.47 Other rules regarding the disclosure of confidential information.

(a) *Further disclosure prohibited.* (1) All confidential information made available under this subpart shall remain the property of the CFPB, unless the Associate Director for Supervision, Enforcement, and Fair Lending provides otherwise in writing.

(2) Except as set forth in this subpart, no supervised financial institution, Agency, any officer, director, employee or agent thereof, or any other person to whom the confidential information is made available under this subpart, may further disclose such confidential information without the prior written permission of the Associate Director for Supervision, Enforcement, and Fair Lending.

(3) No person obtaining access to confidential information pursuant to this subpart may make a personal copy of any such information, and no person may remove confidential information from the premises of the institution or agency in possession of such information except as permitted under this subpart or by the CFPB.

(b) *Third party requests for information.* (1) A supervised financial institution, agency, any officer, director, employee or agent thereof, or any other person to whom the CFPB's confidential information is made available under this subpart, that receives from a third party a legally enforceable demand or request for such confidential information (including but not limited to, a subpoena or discovery request or a request made pursuant to the Freedom of Information Act, 5 U.S.C. 552, the Privacy Act of 1974, 5 U.S.C. 552a, or any State analogue to such statutes) should:

(i) Inform the General Counsel of such request or demand in writing and provide the General Counsel with a copy of such request or demand as soon as practicable after receiving it;

(ii) To the extent permitted by applicable law, advise the requester that:

(A) The confidential information sought may not be disclosed insofar as it is the property of the CFPB; and

(B) Any request for the disclosure of such confidential information is properly directed to the CFPB pursuant to its regulations set forth in this part.

(iii) Consult with the General Counsel before complying with the request or demand, and to the extent applicable:

(A) Give the CFPB a reasonable opportunity to respond to the demand or request;

(B) Assert all reasonable and appropriate legal exemptions or privileges that the CFPB may request be asserted on its behalf; and

(C) Consent to a motion by the CFPB to intervene in any action for the purpose of asserting and preserving any claims of confidentiality with respect to any confidential information.

(2) Nothing in this section shall prevent a supervised financial institution, agency, any officer, director, employee or agent thereof, or any other person to whom the information is made available under this subpart from complying with a legally valid and enforceable order of a court of competent jurisdiction compelling production of the CFPB's confidential information, or, if compliance is deemed compulsory, with a request or demand from either House of the Congress or a duly authorized committee of the Congress. To the extent that compulsory disclosure of confidential information occurs as set forth in this paragraph, the producing party shall use its best efforts to ensure that the requestor secures an appropriate protective order or, if the requestor is a legislative body, use its best efforts to obtain the commitment or agreement of the legislative body that it will maintain the confidentiality of the confidential information.

(c) *Additional conditions and limitations.* The CFPB may impose any additional conditions or limitations on disclosure or use under this subpart that it determines are necessary.

(d) *Return or destruction of records.* The CFPB may require any person in possession of CFPB confidential information to return the records to the CFPB or destroy them.

(e) *Non-waiver of CFPB rights.* The disclosure of confidential information to any person in accordance with this subpart does not constitute a waiver by the CFPB of its right to control, or impose limitations on, the subsequent use and dissemination of the information.

(f) *Non-waiver of privilege*—(1) *In general.* The CFPB shall not be deemed to have waived any privilege applicable to any information by transferring that information to, or permitting that information to be used by, any Federal or State Agency.

(2) *Rule of Construction.* Paragraph (f)(1) of this section shall not be construed as implying that any person waives any privilege applicable to any information because paragraph (f)(1) of this section does not apply to the transfer or use of that information.

(g) *Reports of unauthorized disclosure.* Any person in possession of confidential information shall immediately notify the CFPB upon the discovery of any disclosures made in violation of this subpart.

§ 1070.48 Disclosure of confidential information by the Inspector General.

(a) Nothing in this subpart shall limit the discretion of the Office of the Inspector General of the Board of Governors of the Federal Reserve System and the Consumer Financial Protection Bureau to disclose confidential information as needed in accordance with the Inspector General Act of 1978, 5 U.S.C. App. 3.

Subpart E—Privacy Act

§ 1070.50 Purpose and scope; definitions.

(a) This subpart implements the provisions of the Privacy Act of 1974, 5 U.S.C. 552a (the Privacy Act). The regulations apply to all records maintained by the CFPB and which are retrieved by an individual's name or personal identifier. The regulations set forth the procedures for requests for access to, or amendment of, records concerning individuals that are contained in systems of records maintained by the CFPB. These regulations should be read in conjunction with the Privacy Act, which provides additional information about this topic.

(b) For purposes of this subpart, the following definitions apply:

(1) The term *Chief Privacy Officer* means the Chief Information Officer of the CFPB or any CFPB employee to whom the Chief Information Officer has delegated authority to act under this part;

(2) The term *guardian* means the parent of a minor, or the legal guardian of any individual who has been declared to be incompetent due to physical or mental incapacity or age by a court of competent jurisdiction;

(3) *Individual* means a citizen of the United States or an alien lawfully admitted for permanent residence;

(4) *Maintain* includes maintain, collect, use, or disseminate;

(5) *Record* means any item, collection, or grouping of information about an individual that is maintained by an agency, including, but not limited to, his education, financial transactions, medical history, and criminal or employment history and that contains his name or the identifying number, symbol, or other identifying particular assigned to the individual, such as a finger or voiceprint or a photograph;

(6) *Routine use* means the disclosure of a record that is compatible with the purpose for which it was collected;

(7) *System of records* means a group of any records under the control of an agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual; and

(8) *Statistical record* means a record in a system of records maintained for statistical research or reporting purposes only and not used in whole or in part in making any determination about an identifiable individual, except as provided by 13 U.S.C. 8.

§ 1070.51 Authority and responsibilities of the Chief Privacy Officer.

The Chief Privacy Officer is authorized to:

(a) Develop, implement, and maintain an organization-wide privacy program;

(b) Respond to requests for access to, accounting of, or amendment of records contained in a system of records maintained by the CFPB;

(c) Approve the publication of new systems of records and amend existing systems of record; and

(d) File any necessary reports related to the Privacy Act.

§ 1070.52 Fees.

(a) *Copies of records.* The CFPB shall provide the requester with copies of records requested pursuant to § 1070.53 at the same cost charged for duplication of records under § 1070.22.

(b) *No fee.* The CFPB will not charge a fee if:

(1) Total charges associated with a request are less than $5, or

(2) The requester is a CFPB employee or former employee, or an applicant for employment with the CFPB, and the request pertains to that employee, former employee, or applicant.

§ 1070.53 Request for access to records.

(a) *Procedures for making a request for access to records.* An individual's requests for access to records that pertain to that individual (or to the individual for whom the requester serves as guardian) may be submitted to the CFPB in writing as follows:

(1) If submitted by mail or delivery service, the request shall be labeled "Privacy Act Request" and shall be addressed to the Chief Privacy Officer, Consumer Financial Protection Bureau, 1700 G Street NW., Washington, DC 20552.

(2) If submitted by electronic means, the request shall be labeled "Privacy Act Request" and the request shall be submitted as set forth at the CFPB's Web site, *http://www.consumerfinance.gov.*

(b) *Content of a request for access to records.* A request for access to records shall include:

(1) A statement that the request is made pursuant to the Privacy Act;

(2) The name of the system of records that the requester believes contains the record requested, or a description of the nature of the record sought in detail sufficient to enable CFPB personnel to locate the system of records containing the record with a reasonable amount of effort;

(3) Whenever possible, a description of the nature of the record sought, the date of the record or the period in which the requester believes that the record was created, and any other information that might assist the CFPB in identifying the record sought (*e.g.*, maiden name, dates of employment, account information, etc.).

(4) Information necessary to verify the requester's identity pursuant to paragraph (c) of this section;

(5) The mailing or email address where the CFPB's response or further correspondence should be sent.

(c) *Verification of identity.* To obtain access to the CFPB's records pertaining to a requester, the requester shall provide proof to the CFPB of the requester's identity as provided below.

(1) In general, the following will be considered adequate proof of a requester's identity:

(i) A photocopy of two forms of identification, including one form of identification that bears the requester's photograph, and one form of identification that bears the requester's signature;

(ii) A photocopy of a single form of identification that bears both the requester's photograph and signature; or

(iii) A statement swearing or affirming the requester's identity and to the fact that the requester understands the penalties provided in 5 U.S.C. 552a(i)(3).

(2) Notwithstanding paragraph (c)(1) of this section, a designated official may require additional proof of the requester's identity before action will be taken on any request, if such official determines that it is necessary to protect against unauthorized disclosure of information in a particular case. In addition, if a requester seeks records pertaining to an individual in the requester's capacity as that individual's guardian, the requester shall be required to provide adequate proof of the requester's legal relationship before action will be taken on any request.

(d) *Request for accounting of previous disclosures.* An individual may request an accounting of previous disclosures of records pertaining to that individual in a system of records as provided in 5 U.S.C. 552a(c). Such requests should conform to the procedures and form for requests for access to records set forth in paragraphs (a) and (b) of this section.

§ 1070.54 CFPB procedures for responding to a request for access.

(a) *Acknowledgment and response.* The CFPB will provide written acknowledgement of the receipt of a request within twenty (20) business days from the receipt of the request and will, where practicable, respond to each request within that twenty (20) day period. When a full response is not practicable within the twenty (20) day period, the CFPB will respond as promptly as possible.

(b) *Disclosure.* (1) When the CFPB discloses information in response to a request, the CFPB will make the information available for inspection and copying during regular business hours as provided in § 1070.13, or the CFPB will mail it or email it to the requester, if feasible, upon request.

(2) The requester may bring with him or her anyone whom the requester chooses to see the requested material. All visitors to the CFPB's buildings must comply with the applicable security procedures.

(c) *Denial of a request.* If the CFPB denies a request made pursuant to § 1070.53, it will inform the requester in writing of the reason(s) for denial and the procedures for appealing the denial.

§ 1070.55 Special procedures for medical records.

If an individual requests medical or psychological records pursuant to § 1070.53, the CFPB will disclose them directly to the requester unless the CFPB determines that such disclosure could have an adverse effect on the requester. If the CFPB makes that determination, the CFPB shall provide the information to a licensed physician or other appropriate representative that the requester designates, who shall disclose those records to the requester in a manner he or she deems appropriate.

§ 1070.56 Request for amendment of records.

(a) *Procedures for making request.* (1) If an individual wishes to amend a record that pertains to that individual in a system of records, that individual may submit a request in writing to the Chief Privacy Officer, as set forth in § 1070.53(a). The request shall be labeled "Privacy Act Amendment Request."

(2) A request for amendment of a record must:

(i) Identify the name of the system of records that the requester believes contains the record for which the amendment is requested, or a description of the nature of the record in detail sufficient to enable CFPB personnel to locate the system of records containing the record with a reasonable amount of effort;

(ii) Specify the portion of that record requested to be amended; and

(iii) Describe the nature and reasons for each requested amendment.

(3) When making a request for amendment of a record, the CFPB will require a requester to verify his or her identity under the procedures set forth in § 1070.53(c), unless the requester has already done so in a related request for access or amendment.

(b) *Burden of proof.* In a request for amendment of a record, the requester bears the burden of proving by a preponderance of the evidence that the record is not accurate, relevant, timely, or complete.

§ 1070.57 CFPB review of a request for amendment of records.

(a) *Time limits.* The CFPB will acknowledge a request for amendment of records within ten (10) business days after it receives the request. In the acknowledgment, the CFPB may request additional information necessary for a determination on the request for amendment. The CFPB will make a determination on a request to amend a record promptly.

(b) *Contents of response to a request for amendment.* When the CFPB responds to a request for amendment, the CFPB will inform the requester in writing whether the request is granted or denied, in whole or in part. If the CFPB grants the request, it will take the necessary steps to amend the record and, when appropriate and possible, notify prior recipients of the record of its action. If the CFPB denies the request, in whole or in part, it will inform the requester in writing:

(1) Why the request (or portion of the request) was denied;

(2) That the requester has a right to appeal; and

(3) How to file an appeal.

§ 1070.58 Appeal of adverse determination of request for access or amendment.

(a) *Appeal.* A requester may appeal a denial of a request made pursuant to § 1070.53 or § 1070.56 within ten (10) business days after the CFPB notifies the requester that it has denied the request.

(b) *Content of appeal.* A requester may submit an appeal in writing as set forth in § 1070.53(a). The appeal shall be addressed to the General Counsel and labeled "Privacy Act Appeal." The appeal must also:

(1) Specify the background of the request; and

(2) Provide reasons why the requester believes the denial is in error.

(c) *Determination.* The General Counsel will make a determination as to whether to grant or deny an appeal within thirty (30) business days from the date it is received, unless the General Counsel extends the time for good cause.

(1) If the General Counsel grants an appeal regarding a request for amendment, he or she will take the necessary steps to amend the record and, when appropriate and possible, notify prior recipients of the record of its action.

(2) If the General Counsel denies an appeal, he or she will inform the requester of such determination in writing, including the reasons for the denial, and the requester's right to file a statement of disagreement and to have a court review its decision.

(d) *Statement of disagreement.* (1) If the General Counsel denies an appeal regarding a request for amendment, a requester may file a concise statement of disagreement with the denial. The CFPB will maintain the requester's statement with the record that the requester sought to amend and any disclosure of the record will include a copy of the requester's statement of disagreement.

(2) When practicable and appropriate, the CFPB will provide a copy of the statement of disagreement to any prior recipients of the record.

§ 1070.59 Restrictions on disclosure.

The CFPB will not disclose any record about an individual contained in a system of records to any person or agency without the prior written consent of that individual unless the disclosure is authorized by 5 U.S.C. 552a(b). Disclosures authorized by 5 U.S.C. 552a(b) include disclosures that are compatible with one or more routine uses that are contained within the CFPB's Systems of Records Notices, which are available on the CFPB's Web site, at *http://www.consumerfinance.gov.*

§ 1070.60 Exempt records.

(a) *Exempt systems of records.* Pursuant to 5 U.S.C. 552a(k)(2), the CFPB exempts the systems of records listed below from 5 U.S.C. 552a(c)(3), (d), (e)(1), (e)(4)(G)–(H), and (f), and §§ 1070.53 through 1070.59, to the extent that such systems of records contain investigatory materials compiled for law enforcement purposes, provided, however, that if any individual is denied any right, privilege, or benefit to which he or she would otherwise be entitled under Federal law, or for which he or she would otherwise be eligible as a result of the maintenance of such material, such material shall be disclosed to such individual, except to the extent that the disclosure of such material would reveal the identity of a source who furnished information to the CFPB under an express promise that the identity of the source would be held in confidence:

(1) CFPB.002 Depository Institution Supervision Database.

(2) CFPB.003 Non-Depository Institution Supervision Database.

(3) CFPB.004 Enforcement Database.

(4) CFPB.005 Consumer Response System.

(b) *Information compiled for civil actions or proceedings.* This subpart does not permit an individual to have access to any information compiled in reasonable anticipation of a civil action or proceeding.

§ 1070.61 Training; rules of conduct; penalties for non-compliance.

(a) *Training.* The Chief Privacy Officer shall institute a training program to instruct CFPB employees and contractor personnel covered by 5 U.S.C. 552a(m), who are involved in the design, development, operation, or maintenance of any CFPB system of records, on a continuing basis with respect to the duties and responsibilities imposed on them and the rights conferred on individuals by the Privacy Act, the regulations in this subpart, and any other related regulations. Such training shall provide suitable emphasis on the civil and criminal penalties imposed on the CFPB and the individual employees by the Privacy Act for non-compliance with specified requirements of the Act as implemented by the regulations in this subpart.

(b) *Rules of conduct.* The following rules of conduct are applicable to employees of the CFPB (including, to the extent required by the contract or 5 U.S.C. 552a(m), Government contractors and employees of such contractors), who are involved in the design, development, operation or maintenance of any system of records, or in maintain any records, for or on behalf of the CFPB.

(1) The head of each office of the CFPB shall be responsible for assuring that employees subject to such official's supervision are advised of the provisions of the Privacy Act, including the criminal penalties and civil liabilities provided therein, and the regulations in this subpart, and that such employees are made aware of their individual and collective responsibilities to protect the security of personal information, to assure its accuracy, relevance, timeliness and completeness, to avoid unauthorized disclosure either orally or in writing, and to ensure that no system of records is maintained without public notice.

(2) Employees of the CFPB involved in the design, development, operation, or maintenance of any system of records, or in maintaining any record shall:

(i) Collect no information of a personal nature from individuals unless authorized to collect it to achieve a function or carry out a responsibility of the CFPB;

(ii) Collect information, to the extent practicable, directly from the individual to whom it relates;

(iii) Inform each individual asked to supply information, on the form used to collect the information or on a separate form that can be retained by the individual of—

(A) The authority (whether granted by statute, or by executive order of the President) which authorizes the solicitation of the information and whether disclosure of such information is mandatory or voluntary;

(B) The principal purpose or purposes for which the information is intended to be used;

(C) The routine uses which may be made of the information, as published pursuant to 5 U.S.C. 552a(e)(4)(D); and

(D) The effects on the individual, if any, of not providing all or any part of the requested information.

(iv) Not collect, maintain, use or disseminate information concerning an individual's religious or political beliefs or activities or membership in associations or organizations, unless expressly authorized by statute or by the individual about whom the record is maintained or unless pertinent to and within the scope of an authorized law enforcement activity;

(v) Advise their supervisors of the existence or contemplated development of any record system which is capable of retrieving information about individuals by individual identifier;

(vi) Assure that no records maintained in a CFPB system of records are disseminated without the permission of the individual about whom the record pertains, except when authorized by 5 U.S.C. 552a(b);

(vii) Maintain and process information concerning individuals with care in order to ensure that no inadvertent disclosure of the information is made either within or without the CFPB;

(viii) Prior to disseminating any record about an individual to any person other than an agency, unless the dissemination is made pursuant to 5 U.S.C. 552a(b)(2) of this section, make reasonable efforts to assure that such records are accurate, complete, timely, and relevant for agency purposes; and

(ix) Assure that an accounting is kept in the prescribed form, of all dissemination of personal information outside the CFPB, whether made orally or in writing, unless disclosed under 5 U.S.C. 552 or subpart B of this part.

(3) The head of each office of the CFPB shall, at least annually, review the record systems subject to their supervision to ensure compliance with the provisions of the Privacy Act of 1974 and the regulations in this subpart.

§ 1070.62 Preservation of records.

The CFPB will preserve all correspondence pertaining to the requests that it receives under this part, as well as copies of all requested records, until disposition or destruction is authorized by title 44 of the United States Code or the National Archives and Records Administration's General Records Schedule 14. Records will not be disposed of or destroyed while they are the subject of a pending request, appeal, proceeding, or lawsuit.

§ 1070.63 Use and collection of Social Security numbers.

The CFPB will ensure that employees authorized to collect information are aware:

(a) That individuals may not be denied any right, benefit, or privilege as a result of refusing to provide their Social Security numbers, unless the collection is authorized either by a statute or by a regulation issued prior to 1975; and

(b) That individuals requested to provide their Social Security numbers must be informed of:

(1) Whether providing Social Security numbers is mandatory or voluntary;

(2) Any statutory or regulatory authority that authorizes the collection of Social Security numbers; and

(3) The uses that will be made of the numbers.

PART 1091—PROCEDURAL RULE TO ESTABLISH SUPERVISORY AUTHORITY OVER CERTAIN NONBANK COVERED PERSONS BASED ON RISK DETERMINATION

■ 2. The authority citation for part 1091 continues to read as follows:

Authority: 12 U.S.C. 5512(b)(1), 5514(a)(1)(C), 5514(b)(7).

Subpart B—Determination and Voluntary Consent Procedures

■ 3. Section 1091.103 is amended by revising paragraph (a)(2)(vii) to read as follows:

§ 1091.103 Contents of notice.

* * * * *

(a) * * *

(2) * * *

(vii) In connection with a proceeding under this part, including a petition for termination under § 1091.113, all documents, records or other items submitted by a respondent to the Bureau, all documents prepared by, or on behalf of, or for the use of the Bureau, and any communications between the Bureau and a person, shall be deemed confidential supervisory information under 12 CFR 1070.2(j).

* * * * *

Subpart D—Time Limits and Deadlines

■ 4. Section 1091.115 is amended by revising paragraph (c) to read as follows:

§ 1091.115 Change of time limits and confidentiality of proceedings.

* * * * *

(c) In connection with a proceeding under this part, including a petition for termination under § 1091.113, all documents, records or other items submitted by a respondent to the Bureau, all documents prepared by, or on behalf of, or for the use of the Bureau, and any communications between the Bureau and a person, shall be deemed confidential supervisory information under 12 CFR 1070.2(j).

Dated: July 13, 2016.

Richard Cordray,

Director, Bureau of Consumer Financial Protection.

[FR Doc. 2016–19594 Filed 8–23–16; 8:45 am]

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Part VI

Department of Health and Human Services

Food and Drug Administration

21 CFR Parts 16 and 58
Good Laboratory Practice for Nonclinical Laboratory Studies; Proposed Rule

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Parts 16 and 58

[Docket No. FDA–2010–N–0548]

Good Laboratory Practice for Nonclinical Laboratory Studies

AGENCY: Food and Drug Administration, HHS.

ACTION: Proposed rule.

SUMMARY: The Food and Drug Administration (FDA) is proposing to amend the regulations for good laboratory practice (GLP) for nonclinical laboratory studies to require a complete quality system approach, referred to as a GLP Quality System, when safety and toxicity studies support or are intended to support applications or submissions for products regulated by FDA. We are proposing additional management responsibilities and standard operating procedures (SOPs) consistent with the proposed requirement for a GLP Quality System. We also propose to revise the testing facility definition to reflect current practices for the conduct of nonclinical laboratory studies, particularly multisite studies. These proposals are intended to build quality into planning, conducting, and reporting a nonclinical laboratory study and to help ensure data quality and integrity.

DATES: Submit either electronic or written comments on the proposed rule by November 22, 2016. Submit comments on information collection issues under the Paperwork Reduction Act of 1995 by September 23, 2016 see section IX). See section VII for the proposed effective date of a final rule based on this proposed rule.

ADDRESSES: You may submit comments as follows:

Electronic Submissions

Submit electronic comments in the following way:

- Federal eRulemaking Portal: *http://www.regulations.gov.* Follow the instructions for submitting comments. Comments submitted electronically, including attachments, to *http://www.regulations.gov* will be posted to the docket unchanged. Because your comment will be made public, you are solely responsible for ensuring that your comment does not include any confidential information that you or a third party may not wish to be posted, such as medical information, your or anyone else's Social Security number, or confidential business information, such as a manufacturing process. Please note that if you include your name, contact information, or other information that identifies you in the body of your comments, that information will be posted on *http://www.regulations.gov.*
- If you want to submit a comment with confidential information that you do not wish to be made available to the public submit the comment as a written/paper submission and in the manner detailed (see "Written/Paper Submissions" and "Instructions").

Written/Paper Submissions

Submit written/paper submissions as follows:

- *Mail/Hand delivery/Courier (for written/paper submissions):* Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.
- For written/paper comments submitted to the Division of Dockets Management, FDA will post your comment, as well as any attachments, except for information submitted, marked and identified, as confidential, if submitted as detailed in "Instructions."

Instructions: All submissions received must include the Docket No. FDA–2010–N–0548 for "Good Laboratory Practice for Nonclinical Laboratory Studies." Received comments will be placed in the docket and, except for those submitted as "Confidential Submissions," publicly viewable at *http://www.regulations.gov* or at the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

- Confidential Submissions—To submit a comment with confidential information that you do not wish to be made publicly available submit your comments only as a written/paper submission. You should submit two copies total. One copy will include the information you claim to be confidential with a heading or cover note that states "THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION." The Agency will review this copy, including the claimed confidential information, in its consideration of comments. The second copy, which will have the claimed confidential information redacted/blacked out, will be available for public viewing and posted on *http://www.regulations.gov.* Submit both copies to the Division of Dockets Management. If you do not wish your name and contact information to be made publicly available, you can provide this information on the cover sheet and not in the body of your comments and you must identify this information as "confidential." Any information marked as "confidential" will not be disclosed except in accordance with 21 CFR 10.20 and other applicable disclosure law. For more information about FDA's posting of comments to public dockets, see 80 FR 56469, September 18, 2015, or access the information at: *http://www.fda.gov/regulatoryinformation/dockets/default.htm.*

Docket: For access to the docket to read background documents or the electronic and written/paper comments received, go to *http://www.regulations.gov* and insert the docket number, found in brackets in the heading of this document, into the "Search" box and follow the prompts and/or go to the Division of Dockets Management, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

Submit comments on information collection issues to the Office of Management and Budget (OMB) in the following ways:

Fax to the Office of Information and Regulatory Affairs, OMB, Attn: FDA Desk Officer, FAX: 202–395–7285, or email to *oira_submission@omb.eop.gov.* All comments should be identified with the title, "Reporting and Recordkeeping Requirements for Good Laboratory Practice for Nonclinical Laboratory Studies."

FOR FURTHER INFORMATION CONTACT: Vernon Toelle, Office of Surveillance and Compliance, Center for Veterinary Medicine, Food and Drug Administration, 7519 Standish Pl., MPN4–142, Rockville, MD 20855, 240–402–5637; or Kristin Webster Maloney, Office of Policy and Risk Management, Office of Regulatory Affairs, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 32, Rm. 4373, Silver Spring, MD 20993, 240–402–4993.

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I. Executive Summary

A. Purpose of the Proposed Rule

Nonclinical laboratory studies, often referred to as preclinical studies when conducted before first-in-human clinical studies, provide safety or toxicity information, or both, that is essential for the development of FDA-regulated products and help determine the safety of new food ingredients. For drugs administered to animals whose products will be consumed by humans, nonclinical laboratory studies are critical for determining safe levels of residual drug product. For tobacco products, nonclinical laboratory studies may provide evidence regarding the relative toxicities of new or modified risk tobacco products. FDA's regulation of the conduct of nonclinical laboratory studies is important to help ensure the quality and integrity of data derived from those studies, the protection of human subjects, and that marketing decisions are based on accurate and reliable data.

Therefore, FDA proposes to amend the GLP regulations to require the use of a complete quality system approach (proposed GLP Quality System) when a nonclinical laboratory study supports or is intended to support an application or submission to FDA. Part 58 (21 CFR part 58) presently includes many aspects of a quality system approach. However, certain fundamentals of a fully implemented GLP Quality System considered essential to a quality system, such as certain SOPs and adequate management roles, responsibilities, and accountability, are not presently required. We therefore propose a fully implemented GLP Quality System as the proper framework for building quality into planning, conducting, and reporting a nonclinical laboratory study to help ensure the quality and integrity of the resulting data used to support FDA regulatory decisions.

We also propose to amend the GLP regulations to reflect current practices for the conduct of nonclinical laboratory studies, particularly multisite studies, while allowing industry flexibility to meet the proposed requirements.

B. Summary of the Major Provisions of the Proposed Rule

Under the proposed GLP Quality System, FDA intends to enhance the current quality system approach for nonclinical laboratory studies. The GLP Quality System will provide additional responsibilities for testing facility management and new responsibilities for maintaining SOPs. We propose modifications to the definition of a testing facility to be applicable to all nonclinical laboratory studies, whether they are conducted at a single facility or at multiple sites. We propose amending roles and functions consistent with the revised testing facility definition. FDA expects that a GLP Quality System will provide the appropriate framework for building quality into a nonclinical laboratory study and will result in more reliable data for FDA to consider when making regulatory decisions.

C. Legal Authority

FDA proposes to issue this rule under the authority of the provisions in sections 351 and 354–360F of the Public Health Service Act (PHS Act) and the provisions in the Federal Food, Drug, and Cosmetic Act (the FD&C Act) applicable to the conduct of nonclincial laboratory studies, specifically under section 701(a) of the FD&C Act (21 U.S.C. 371(a), as essential to enforcement of the Agency's responsibilities under sections 402, 406, 408, 409, 501, 502, 503, 505, 510, 512–516, 518–520, 571, 721, 801, 905, 910, and 911 of the FD&C Act (21 U.S.C. 342, 346, 348, 349, 351, 352, 353, 355, 360, 360b–360f, 360h–360j, 360ccc, 379, 381, 387e, 387j, and 387k).

D. Costs and Benefits

Costs estimates of the rule include annual costs from the additional reporting and recordkeeping responsibilities required under the proposed GLP Quality System. One-time costs include reading and understanding the rule, updating existing SOPs, writing new SOPs, and training. We estimate annualized costs, over a 10-year period, at a 7-percent discount rate would average $51.9 million, or $51.5 million with a 3-percent discount rate. We lack sufficient information to quantify the benefits of the proposed rule, but we anticipate that it would result in better quality and more reliable data to support applications and submissions to us. The table summarizes these estimates along with their ranges.

SUMMARY OF BENEFITS, COSTS AND DISTRIBUTIONAL EFFECTS OF PROPOSED RULE

Category	Primary estimate	Low estimate	High estimate	Units			Notes
				Year dollars	Discount rate (%)	Period covered (years)	
Benefits:							
Annualized Monetized $millions/year				2014	7	10	
				2014	3	10	
Annualized Quantified				2014	7	10	
				2014	3	10	
Qualitative	The proposed rule would clarify GLP standards to facilitate a more consistent approach and provide greater international consistency. As a result, we anticipate improvements in the integrity and quality of data submitted for FDA review decisions.						
Costs:							

SUMMARY OF BENEFITS, COSTS AND DISTRIBUTIONAL EFFECTS OF PROPOSED RULE—Continued

Category	Primary estimate	Low estimate	High estimate	Units			Notes
				Year dollars	Discount rate (%)	Period covered (years)	
Annualized Monetized $millions/year	$51.9	$34.4	$69.3	2014	7	10	
	51.5	34.2	68.9	2014	3	10	
Annualized				2014	7	10	
Quantified				2014	3	10	
Qualitative:							
Federal				2014	7	10	
Annualized				2014	3	10	
Monetized millions/year	From:			To:			
Transfers:							
Other				2014	7	10	
Annualized				2014	3	10	
Monetized millions/year	From:			To:			
Effects:	State, Local or Tribal Government: None estimated. Small Business: The proposed requirements would likely impose a significant burden on small entities employing fewer than 10 workers in "Dental Equipment and Supplies" (between 1.87 and 8.94 percent of average annual sales). However, we do not have data on how many of these dental-equipment small entities perform nonclinical laboratory studies to support, or intended to support, an application or submission regulated by us; only such entities would be affected by the rule. Wages: None estimated.							

II. Introduction

FDA is proposing to amend the GLP regulations in part 58 to require the use of a complete quality system approach, referred to as a GLP Quality System, for the conduct of nonclinical laboratory studies when safety or toxicity studies, or both, support or are intended to support applications or submissions to FDA. FDA proposes to define a GLP Quality System as the organizational structure, responsibilities, procedures, processes, and resources for implementing quality management in the conduct of nonclinical laboratory studies.

While many aspects of a quality system approach are presently included in part 58, we expect that implementation of a GLP Quality System will provide an improved framework that is more flexible and will help ensure quality in planning, conducting, and reporting nonclinical laboratory studies. Consistent with the proposed requirement for a GLP Quality System, we propose additional management responsibilities, with accompanying SOPs, to ensure management's responsibility for establishing and maintaining the quality system. We also propose to revise the definition of a testing facility to reflect current practices for the conduct of nonclinical laboratory studies, particularly the conduct of multisite studies. Conforming modifications are proposed for consistency with the proposed GLP Quality System and today's prevalence of multisite studies.

FDA is proposing these changes to help ensure the quality and integrity of data from nonclinical laboratory studies conducted in support of applications and submissions to FDA. We also are modernizing the regulations to further the Agency's efforts to encourage the implementation of the principles of the "3Rs," to reduce, refine, and replace animal use in testing. This approach seeks to minimize the use of animals in such testing and promote more humane, appropriate, and specific test methods for evaluating product safety. These proposed changes will clarify and update the regulations. In particular, we are proposing changes recognizing the current prevalence of multisite studies while adding flexibility consistent with current practices and the use of ever-changing technology.

A. What is the background for this rule?

On December 21, 2010, FDA published an advanced notice of proposed rulemaking (ANPRM), "Good Laboratory Practice for Nonclinical Laboratory Studies" (December 2010 ANPRM) (75 FR 80011), to solicit stakeholder input regarding FDA's intention to modify the GLP regulations in part 58. As stated in the December 2010 ANPRM, FDA is proposing to require that all facilities conduct nonclinical laboratory studies under a GLP Quality System when those studies support or are intended to support an application or submission to FDA.

The December 2010 ANPRM addressed nine specific areas to consider for amending part 58. Those nine areas are: (1) The GLP Quality System, (2) Multisite Studies, (3) Electronic/Computerized Systems, (4) Sponsor Responsibilities, (5) Animal Welfare, (6) Information on Quality Assurance Inspection Findings, (7) Process-Based Systems Inspections, (8) Test and Control Article Information, and (9) Sample Storage Container Retention.

FDA received about 90 comments to the December 2010 ANPRM. Most of the comments address the nine specific areas; however, a number of the comments include additional areas for FDA's consideration. All comments were reviewed and considered by a working group with representatives from all FDA Centers, along with representatives from the U.S. Environmental Protection Agency (EPA), the Animal and Plant Health Inspection Service of the U.S.

Department of Agriculture (USDA/APHIS), and the Office of Laboratory Animal Welfare at the National Institutes of Health (NIH/OLAW).

In addition to the December 2010 ANPRM comments, we reviewed and considered the documents of the working group on GLP of the Organisation for Economic Co-operation and Development (OECD), including the general principles of GLP and consensus and advisory documents (Ref. 1). The United States is a signatory to OECD's GLP Mutual Acceptance of Data agreement (Ref. 2) and, as an OECD member country, FDA participated in the development of OECD's GLP documents. For this proposal, we strive for consistency with the relevant OECD documents whenever possible.

B. Why is FDA proposing this rule?

The proposed GLP Quality System would help to provide a flexible framework for building quality into planning, conducting, and reporting a nonclinical laboratory study, and would help ensure the integrity of data submitted to FDA to support FDA regulatory decisions. The present regulations do not require certain fundamentals considered essential to a complete quality system. For example, the present regulations do not specifically require SOPs for developing and maintaining SOPs, or SOPs for developing and periodically assessing a quality system, nor do they provide for adequate management roles, responsibilities, and accountability. We note that a major principle of a complete quality system is management's ultimate responsibility for establishing and maintaining the quality system.

This proposal also is intended to update the regulations to reflect today's conduct of nonclinical laboratory studies, particularly the conduct of multisite studies. For multisite studies that may have multiple contracts and subcontracts for various study phases, effective communication is essential, especially considering the proposed requirement for a single final study report. We agree with the numerous comments to the December 2010 ANPRM that support a clear delineation of study responsibilities and effective communication among all parties involved in multisite studies.

Some stakeholders suggest that certain provisions in part 58 are outdated and hamper efficient use of present technology (for example, requiring hard copies of records and documentation instead of allowing computerized options). Several industry organizations approached FDA after the announcement of the Bioresearch Monitoring (BIMO) Modernization Initiative in 2006 (Ref. 3), requesting that we modernize the GLP regulations. One request, among others, was to remove the requirement that the quality assurance unit (QAU) must maintain the master schedule and copies of protocols. These requests were echoed in several comments to the December 2010 ANPRM. FDA agrees with those comments and proposes to update part 58 to help address the use of present technology.

Because the number of FDA inspections is limited by competing priorities and limited resources, we look to sponsors and nonclinical laboratory management to help ensure that data submitted to FDA in support of applications and submissions are reliable. For those nonclinical laboratory studies that are the bases for allowing a new medical product into first-in-human clinical studies, the quality and integrity of the data are crucial to human subject protection.

This proposal complements the intent of the original GLP proposed rule to ensure the quality and integrity of the resulting data (41 FR 51206 at 51210, November 19, 1976) (Ref. 4). FDA expects that requiring a GLP Quality System will help ensure data quality and integrity. The proposed GLP Quality System also will allow the flexibility to develop site-specific procedures for related SOPs. Because of the great diversity in institutions, research activities, and organizational structures covered by these regulations, it is important to have sufficient flexibility in the regulations to allow the regulated parties to meet these requirements in a manner that best suits their organizational needs.

III. Description of the Part 58 Proposal

A. What did FDA consider when drafting this rule?

1. Animal Rule

Several comments to the December 2010 ANPRM requested that FDA modify part 58 to accommodate studies conducted in animals to support the effectiveness of human drugs or biological products when human efficacy studies are not ethical or feasible. Those comments refer to the "Animal Rule" (21 CFR parts 314 and 601) (67 FR 37988, May 31, 2002).

The Animal Rule provides a pathway for FDA to grant marketing approval based on adequate and well-controlled animal efficacy studies when the results of those studies establish that the drugs or biological products are reasonably likely to produce clinical benefit in humans. Products evaluated for efficacy under the Animal Rule should be evaluated for safety under the existing requirements for establishing the safety of new drugs and biological products. The provisions in part 314, subpart I for drugs and part 601, subpart H for biological products apply only to situations when adequate and well-controlled human efficacy studies cannot ethically be conducted because they would involve deliberate exposure of healthy human volunteers to a potentially lethal or permanently disabling toxic chemical, biological, radiological, or nuclear substance, and field trials to study the product's effectiveness after an accidental or hostile exposure have not been feasible.

In the past, FDA has said that "All studies subject to this rule must be conducted in accordance with preexisting requirements under the good laboratory practices (21 CFR part 58) regulations" (67 FR 37988 at 37989, May 31, 2002). FDA made this statement because part 58 includes requirements for a quality system structure to ensure the quality and integrity of animal study data. These studies are intended to generate data that are essential for the approval or licensure of products intended for human use. Thus, ensuring the quality and integrity of data from these studies is critical as they serve as substantial evidence of effectiveness of the product.

Part 58 was issued to ensure the quality and integrity of nonclinical laboratory studies conducted to assess the safety of FDA-regulated products. In response to comments made to the ANPRM, FDA questions whether any requirement presently in part 58 or in this proposal poses a unique or disproportionate obstacle or burden on the conduct of certain animal studies specific to product development under the Animal Rule.

FDA, however, tentatively concludes there may be justifiable limitations to applying GLP regulations when conducting Animal Rule-specific studies, especially for studies using challenge agents that require high-containment facilities (for example, biosafety level 4 (BSL–4)[1] laboratory environments). Therefore, although part 58 embodies critical elements of a quality system to ensure data quality and integrity, FDA also recognizes that some current part 58 requirements may not be appropriate, or may require modification to address adequately data quality practices for the Animal Rule-specific studies.

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[1] BSL–4 refers to the practices, safety equipment, and safeguards required for laboratories that work with highly infectious and lethal pathogenic microbes which cause, for example, such lethal diseases in humans as smallpox, Ebola, or Marburg virus hemorrhagic fever. BSL–4 is the highest biosafety level designation possible and means that the most stringent safeguards are in place to protect researchers, non-laboratory building occupants, the general public, and the environment from exposure to exotic or lethal agents.

Accordingly, although not included in the regulatory text portion of this proposal, FDA is considering expanding part 58 to include the conduct of certain Animal Rule studies that support approval or licensure of products for human use under the established data quality and integrity standards. We seek comment on this proposal. In particular, we invite comment on the possibility of amending the scope of the regulation in § 58.1(a) to encompass not only nonclinical laboratory studies, but also to include certain Animal Rule-specific studies. Correspondingly, we are considering adding a definition in § 58.3 for "Animal Rule-specific studies subject to GLP" (for purposes of this document, "Animal Rule-specific studies subject to GLP" are referred to as "covered Animal Rule studies").

Specifically, FDA is considering including within the definition of covered Animal Rule studies only the following types of studies to support product approval under the Animal Rule: (1) The adequate and well-controlled animal efficacy studies that serve as substantial evidence of the effectiveness necessary for approval or licensure of human drugs or biological products, respectively; (2) pharmacokinetic and/or pharmacodynamic studies in animals used to select a dose and regimen in humans; and (3) if seeking qualification through FDA's Animal Model Qualification Program,[2] the model-defining natural history studies.[3] [4]

FDA seeks comment on the impact of expanding part 58 to include these covered Animal Rule studies. We also request comment on what other changes to the regulations, beyond amending the scope and definitions, are needed to address issues unique to covered Animal Rule studies. FDA specifically requests comments in response to the following questions:

1. Would amending part 58 to expand the scope to include covered Animal Rule studies establish an appropriate quality system approach to the conduct of such studies to ensure data quality and integrity? If not, what gaps or shortcomings would remain, and how should they be addressed?

2. Would such an amendment provide sufficient clarity and flexibility to sponsors and investigators? If not, what alternatives or changes to this approach are needed?

3. FDA is considering adding a definition in part 58 for "Animal Rule-specific studies subject to GLP" (referred to as "covered Animal Rule studies"). As discussed in section III.A.1., the proposed definition contains three specific types of studies that would be subject to part 58. Is the term "Animal Rule-specific studies subject to GLP," as defined in § 58.3, clear and appropriately inclusive?

4. What are the benefits, challenges, and burdens of amending part 58 to include covered Animal Rule studies?

a. Would this proposed expansion of the scope in § 58.1(a) impact entities conducting covered Animal Rule studies?

b. Would the proposed expansion of the scope in § 58.1(a) impact those entities engaged in conducting nonclinical laboratory studies to assess product safety?

c. What could be done to minimize burdens or costs, including costs or burdens on small entities, associated with part 58 compliance for covered Animal Rule studies?

5. Are there any challenges or differences involved in the conduct of covered Animal Rule studies (versus nonclinical laboratory studies) that merit different standards or establishment of a separate regulation? If so, what are those challenges or differences, and what alternative(s) would be preferable?

6. Based on possible differences identified in question 5, are there any particular aspects in the current or proposed part 58 that would be unduly difficult to meet? What changes to current part 58, or the proposed amendments, could be made to address or accommodate these issues? For example:

a. Would it be satisfactory to include a provision to allow on a case-by-case basis a covered Animal Rule study sponsor to seek FDA agreement on deviations from certain part 58 requirements that may not be practicable to meet as follows: "When the study is an Animal Rule-specific study subject to GLP, FDA may agree to deviations from any requirement of this part that it finds unnecessary to ensure the quality and integrity of the study by written agreement with the sponsor before the conduct of the study. In such cases, FDA's acceptance of deviations from the requirements will be contingent upon compliance with any alternative requirements included in that agreement."

b. Would it be workable or appropriate to entirely exempt covered Animal Rule studies from certain requirements of part 58? If so, what exemption(s) would be necessary or appropriate?

As discussed in section III.A.1., FDA considers GLP regulations to be a well-established and relevant system for ensuring data quality and integrity for covered Animal Rule studies. Therefore, until a final rule is published, FDA recommends the use of the current GLP framework (for example, definitions, procedures, roles and responsibilities, and controls) for covered Animal Rule studies to the extent practicable, and intends to provide more information about FDA's expectations for adapting a GLP framework to these studies.

Before initiating covered Animal Rule studies, sponsors should identify aspects of the studies anticipated to be challenging with regard to GLP and propose methods for adapting the studies to ensure the quality and integrity of the resulting data. Sponsors should submit this information to FDA for concurrence on the data quality and integrity plan before the studies are initiated. A guidance document is available regarding the essential elements necessary to address efficacy under the Animal Rule.[5]

2. ISO 9001 and GLP Quality System

Many comments to the December 2010 ANPRM note that the International Organization for Standardization (ISO) 9001 is very general and not all aspects outlined in ISO 9001 are applicable to GLPs. FDA acknowledges this.

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[2] The Animal Model Qualification Program is part of FDA's Drug Development Tool (DDT) Qualification Program. The DDT Program provides a framework for development and regulatory acceptance of scientific tools for use in drug development programs. Qualification of an animal model is not required for the approval of drugs or licensure of biologics under the Animal Rule. For more information about this program, see FDA's guidance for industry and FDA staff *Qualification Process for Drug Development Tools* (January 2014) (*http://www.fda.gov/downloads/drugs/guidancecomplianceregulatoryinformation/guidances/ucm230597.pdf*), and the Animal Model Qualification Program Web site: *http://inside.fda.gov:9003/CDER/OfficeofTranslationalSciences/BiomarkerQualifications/ucm271856.htm.*

[3] In the context of animal model qualification, the *model-defining natural history studies* are the animal studies that establish the ranges of values of key parameters of the disease or condition that will be specified in the context of use statement for the qualified model and that will be used as measures of quality control and quality assurance when the model is replicated.

[4] Natural history studies that will not be used to support the qualification of an animal model, as defined in footnote 2, would not be subject to GLP regulations.

[5] See FDA's guidance for industry *Product Development Under the Animal Rule* (October 2015), at *http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM399217.pdf.*

However, ISO 9001 is an internationally recognized standard for quality systems. Also, FDA's Quality System Regulation (QSR) in part 820 (21 CFR part 820) for current good manufacturing practice requirements for medical devices was harmonized, to the extent possible, with the ISO 9001: 1994 "Quality Systems—Model for Quality Assurance in Design, Development, Production, Installation and Servicing."

Some comments to the December 2010 ANPRM state that consistency with the ISO 9001 standard would be acceptable if we retained what they perceived as the present flexibility of the regulations. A number of comments state that it would be beneficial to borrow elements of a quality system from the QSR requirements in part 820 rather than reference ISO 9001:1994. Many comments also request that we define the operational areas necessary for broader adoption of a quality system approach.

In this proposal, we incorporate aspects of ISO 9001:1994 that are consistent with part 820 and our desire to propose a complete quality system approach. For example, we propose to address establishing and maintaining a GLP quality system by adding to part 58 certain definitions, relevant SOPs, and management roles and responsibilities modeled after the part 820 requirements. Our proposed additions to more fully enable a GLP quality system will help expand the present flexibility in part 58. Our proposals also are consistent with OECD guidance documents for GLP wherever possible and, at the very least, do not conflict with them.

3. Animal Welfare

Many comments to the December 2010 ANPRM note that § 58.90 covers animal care and thus, FDA investigators review documentation of animal care during GLP inspections. This is true. If animal care is not compliant with appropriate standards, there is a high likelihood that such noncompliance could confound the results of affected studies. Since the good laboratory practice regulations were published, the Animal Welfare Act has been amended and the public's perception of animal welfare has changed. Therefore, we propose specific responsibilities regarding animal welfare because the humane treatment of animals in research settings is essential to the quality and integrity of GLP studies.

Many comments to the December 2010 ANPRM state that addressing animal welfare in part 58 would be a duplication of USDA/APHIS or the NIH regulations. That is not our intention. FDA has a Memorandum of Understanding (MOU) (Ref. 5) with USDA/APHIS and NIH/OLAW regarding animal welfare oversight. FDA forwards to the relevant regulatory agency any concerns regarding animal welfare observed during FDA inspections for their followup. Those animal welfare observations are not included on a Form FDA 483 (Inspectional Observations) that may be issued at the close of an FDA inspection, unless the observations also show noncompliance with § 58.90.

While this proposal addresses animal welfare concerns, FDA supports the use of non-animal testing methods when scientifically valid alternatives are available. We encourage sponsors with questions about non-animal testing methods to approach FDA early in the development process for consultation on the suitability and acceptability of non-animal tests for their particular product. This approach reflects FDA's position in its May 20, 2010, citizen petition response to the Mandatory Alternatives Petition Coalition and subsequent Agency statements. That petition requested that FDA require only non-animal test methods instead of corresponding animal test methods whenever such scientifically satisfactory methods are available. (See Docket No. FDA–2007–P–0109.)

4. Multisite Studies

As stated in the December 2010 ANPRM, FDA's intent was simply to add new definitions relevant to roles and responsibilities specific to multisite studies. Many comments to the December 2010 ANPRM state that the present regulations are basically adequate and suggested only minimal modifications.

Since publication of the December 2010 ANPRM, we have changed our thinking concerning regulatory changes needed to address multisite studies. For example, we have determined that amending the definition of a testing facility will help address the current conduct of multisite studies. We discuss in section III.B.2. our proposed changes to that definition.

Many comments to the December 2010 ANPRM suggest that we align our requirements regarding multisite studies with the OECD consensus document entitled, *The Application of the OECD Principles of GLP to the Organisation and Management of Multi-Site Studies* (Ref. 6). The comments also requested that we not be as prescriptive as those OECD directives. We agree with those comments. We reviewed and considered this OECD consensus document and incorporated into our proposal the same general concepts, where applicable.

5. GLP Roles and Responsibilities

We propose to maintain the current GLP roles for management, study director, and QAU. We propose that the overarching responsibilities of those who fulfill these roles remain as follows: Management is responsible for establishing and maintaining conditions and procedures necessary for the conduct of nonclinical laboratory studies compliant with GLPs; the study director, as the sole point of study control, is responsible for implementing those procedures in specific studies; and the QAU is responsible for inspecting and general oversight of studies, verifying that they are GLP compliant or recommending changes needed for bringing them into compliance.

These responsibilities complement each other and sometimes overlap in multiple areas, providing for a system of checks and balances. We intend for this proposal to maintain the authority necessary for fulfilling each of these roles while allowing maximum flexibility for the conduct of a GLP-compliant nonclinical laboratory study.

We are interested in feedback about whether this proposal will accomplish our goal of maintaining the necessary interrelationships among these roles, and whether our proposal undermines any one of these roles or fails to provide adequate flexibility.

B. Part 58, Subpart A—General Provisions

1. Scope (§ 58.1)

We propose to expand the scope of FDA-regulated nonclinical laboratory studies to specifically include toxicity studies. For purposes of this proposal, toxicity means the acute or long-term adverse effects that could result from use of the FDA-regulated product. While some nonclinical laboratory studies of FDA-regulated products evaluate a product's safety, including toxicity, most are conducted solely to determine a product's toxicity. For example, when combined with the results of clinical trials, determination of toxicity at various doses can inform an appropriate risk-to-benefit analysis when relevant to FDA's consideration of a product's marketing application or submission.

For drugs administered to animals whose products will be consumed by humans, toxicity studies are critical for determining safe levels of residual drug product. Nonclinical laboratory studies of food ingredients and food contact substances provide the basis for establishing levels at which a substance will not, with reasonable certainty, be harmful under its intended conditions of use. In the evaluation of tobacco products, FDA could use the data derived from nonclinical laboratory studies to evaluate relative toxicity as opposed to evaluating safety.

Additional proposed modifications to the scope in § 58.1 expand the language to include FDA jurisdictional oversight of tobacco products as specified in the FD&C Act, sections 905, 910, and 911. We also propose to modify and broaden "medical devices for human use" to "devices" to include FDA's Center for Veterinary Medicine (CVM), which has jurisdiction over devices used in veterinary medicine.

In addition, we propose changing the provision "for research and marketing permits" to "applications or submissions" for FDA-regulated products. This proposed change will include the applications and submissions to FDA listed in the definitions section of this proposal.

As stated in both the preamble to the original proposed regulations (original GLP proposed rule) (41 FR 51206 at 51210) and the preamble to the original GLP final rule (43 FR 59986 at 59988), the GLP "regulations are intended to ensure, as far as possible, the quality and integrity of test data that are submitted to FDA and become the basis for regulatory decisions made by the Agency." Therefore, the phrase "intended to support" in present and proposed § 58.1(a) means that any nonclinical laboratory study included within the proposed expanded scope of Part 58 that is conducted with the intent that it may support an application or submission to FDA should be conducted in compliance with the GLP regulations.

Also, we propose adding § 58.1(c) to describe what we mean by "where appropriate" when used in the part 58 regulatory text. This proposal addresses studies conducted at a single testing facility as well as at multiple sites. We propose using "where appropriate" in many of the revised or added provisions because not all requirements are applicable to all studies. For example, a test site tasked only with interpreting a study's histopathology would not require all of the SOPs required for a test site responsible for multiple phases.

2. Definitions (§ 58.3)

The current § 58.3 *Definitions*, is not alphabetized and includes paragraphs (a) through (p). We propose to remove the paragraph designations, add new definitions, modify certain current definitions, and alphabetize the complete listing of definitions.

We propose modifying current § 58.3(e) to change the defined term from "Application for research or marketing permit" to "Applications and Submissions to FDA". We propose this change because nonclinical laboratory studies can support applications and submissions to FDA other than those for research and marketing. Also, in the definition for "Applications and Submissions to FDA" proposed paragraphs (1) through (35), we add certain relevant statutory or regulatory citations for consistency.

We propose including applications and submissions for tobacco products described in the FD&C Act. We note that FDA plans to issue regulations under section 910(g), providing conditions under which tobacco products intended for investigational use may be exempted from the requirements of chapter IX of the FD&C Act. It is our intent that applications for such investigational tobacco products will be included within the scope of § 58.3.

We also propose adding those applications and submissions for FDA-regulated products that include nonclinical laboratory study results but are not currently specifically included. For example, Humanitarian Device Exemption applications are new since publishing in 1987 the last final rule modifying part 58. We also propose expressly adding the medical device Premarket Notification (also known as a "510(k)" submission).

Attending Veterinarian: We propose adding a definition for an attending veterinarian. Our proposed definition is the same as the definition in USDA's Animal Welfare Regulations (9 CFR 1.1) but without specifics about educational requirements. We propose defining an attending veterinarian as a veterinarian with training, experience, or both in the care and management of the species being attended, with direct or delegated authority for activities involving animals. We propose this definition because we propose in part 58 certain provisions about animal welfare. For example, we propose that the study director must defer to the attending veterinarian when decisions regarding animal welfare arise, particularly when animals are in pain or distress.

Batch: We propose changing the definition of batch currently in § 58.3(n) to reference the relevant provisions in § 58.105 (Test, control, and reference article characterization) and § 58.107 (Test, control, and reference article handling). We also add that batch means a specific quantity or lot of a reference article (see section III.B.2.), we discuss the addition of a reference article definition.

Contracted Person: We propose adding a definition for contracted person to mean a person that assumes, either directly or indirectly as an independent contractor, one or more of the responsibilities for conducting a nonclinical laboratory study. Several comments to the December 2010 ANPRM state that the responsibilities of all persons (any legal entity) involved in multisite studies need to be addressed in the regulations. We propose the use of this term to allow us to address the comments without specifically identifying all possible contracted entities.

The comments also request that FDA include specifics for multisite studies as to how responsibilities are to be met and by whom. In response to these comments, we intend that a contracted person includes any person (for example, testing facility or individual) that the sponsor contracts with to conduct a phase (defined activity or set of activities) of a nonclinical laboratory study. Also, the term contracted person includes any person that is under a subcontract to conduct a phase of a nonclinical laboratory study.

Contributing Scientist: We propose adding and defining the term contributing scientist. A contributing scientist is an individual responsible for conducting, interpreting, analyzing, or performing any service for a phase of a nonclinical laboratory study. The current regulation in § 58.185 for reporting study results refers to "individual scientists or other professionals involved in the study" (see § 58.185(a)(12)). Our proposal replaces these scientists or other professionals with the term contributing scientist. In addition, when a contributing scientist is a contracted independent expert or specialist, we use the term independent contributing scientist. See, also, section III.C.6. where we discuss § 58.37 (Contributing scientist).

Control Article: We propose modifying the definition of control article currently in § 58.3(c) by changing "medical device for human use" to "device" to expand the regulations to include devices used in veterinary medicine. Also, the revised definition proposes to include a "tobacco product".

Establish: For this part 58 proposal, the meaning of establish is to define, document (in writing or electronically), and implement. We propose adding a definition for establish to help eliminate repeating in the applicable regulatory text the words that define establish. Our proposed definition is identical to the definition of establish in the part 820 quality system regulation in § 820.3(k).

Facility-Based Inspection: We propose introducing the term facility-based inspection to mean a QAU inspection that covers the general facilities and activities; for example, installations, support systems, computer systems, training, environmental monitoring, and equipment maintenance and calibration. This addition, along with the definition of process-based inspection (see section III.B.2.) would allow for greater efficiency instead of duplicating, for each study, inspection of those general facilities and activities. Our proposed definition also is consistent with the definition for facility-based inspection in the OECD document, *Quality Assurance and GLP* (Ref. 7).

GLP Quality System: We propose adding a definition for GLP Quality System to mean the organizational structure, responsibilities, procedures, processes, and resources for implementing quality management in the conduct of nonclinical laboratory studies. As discussed in section II.B., we consider a fully implemented GLP Quality System the proper framework for building quality into planning, conducting, and reporting a nonclinical laboratory study while allowing flexibility for site-specific procedures.

Lead Quality Assurance Unit: We propose adding a definition for a lead quality assurance unit (lead QAU) meaning the QAU responsible for quality assurance (QA) in a multisite nonclinical laboratory study. We propose that testing facility management with executive responsibility selects the lead QAU. The location of the lead QAU may be at the testing facility, with another person conducting a phase of the study, or provided through a contractual relationship. This definition is consistent with the definition for lead QAU in the OECD consensus document, *The Application of the OECD Principles of GLP to the Organisation and Management of Multi-Site Studies* (Ref. 6).

Management with Executive Responsibility: We propose adding a definition for management with executive responsibility to mean senior employees of the testing facility or test site who have the authority to establish or make changes to the quality policy and GLP Quality System at their testing facility or test site. We note that part 820 (see § 820.3(n)) adopted this term describing senior management to be consistent with the quality system specifications in ISO 9001:1994 (61 FR 52602 at 52609, October 7, 1996).

Master Schedule: We propose adding a definition for master schedule that means a compilation of information used for assessment of workload and the tracking of nonclinical laboratory studies. The master schedule will include information about all nonclinical laboratory studies conducted. For multisite studies, the master schedule also will include the phases conducted (see proposed 58.31(k)). Our proposed definition of master schedule is consistent with the definition in the OECD GLP document, *OECD Principles on Good Laboratory Practice* (Ref. 8). When we discuss § 58.31 (Management with executive responsibility, section III.C.2.), we elaborate on requirements concerning the master schedule.

Multisite Study: We propose adding a definition for multisite study to mean any study that has phases (defined in section III.B.2.) conducted at more than one site. Our proposed definition of multisite study is consistent with the definition in the OECD consensus document, *The Application of the OECD Principles of GLP to the Organisation and Management of Multi-Site Studies* (Ref. 6).

Nonclinical Laboratory Study: We propose modifying the current definition in § 58.3(d) for a nonclinical laboratory study to add after "under laboratory conditions" the phrase "or in the applicable environment". This addition recognizes that the conduct of a nonclinical laboratory study is not limited to a traditional laboratory environment. We propose to make clear that the purpose for conducting nonclinical laboratory studies may be to determine relative toxicity. For example, because tobacco products are not safe, nonclinical laboratory studies help FDA evaluate the relative toxicities of those products. We also propose to update the regulations by changing "field trials in animals" to "clinical investigational use in animals", which more accurately describes our intent. We propose a sentence structure change in the last sentence in this definition to clarify our intent, which is often misinterpreted due to the current sentence structure.

Phase: We propose adding a definition for phase to mean a defined activity or set of activities in the conduct of a nonclinical laboratory study. We propose this new definition to aid in understanding the new proposed definition of multisite study, which is any study that has phases conducted at more than one site. Our proposed definition is consistent with the definition of phase in the OECD consensus document, *The Application of the OECD Principles of GLP to the Organisation and Management of Multi-Site Studies* (Ref. 6).

Principal Investigator: We propose adding a definition for principal investigator to mean an individual with specific responsibilities delegated by the study director for a phase of a nonclinical laboratory study. We propose defining principal investigator in general terms rather than specifying the principal investigator's single role in a multisite study as defined in the OECD document, OECD Principles on Good Laboratory Practice (Ref. 8). However, we propose that principal investigator responsibilities are those delegated by the study director, which is consistent with OECD principles. See, also, section III.C.7. where we discuss § 58.39 (Principal investigator).

Process-based Inspection: We propose adding a definition for process-based inspection to mean inspecting repetitive, frequently performed procedures and processes (for example, certain mutagenicity studies). This definition recognizes present practice and allows for greater efficiency, as noted elsewhere (section III.B.2.). Our proposed definition is consistent with the definition for process-based inspection in the OECD document, *Quality Assurance and GLP* (Ref. 7).

Quality: We propose adding a definition for quality, meaning the totality of features and characteristics bearing on the ability of a nonclinical laboratory study to provide reliable data.

Quality Assurance Unit (QAU): We propose modifying the current definition in § 58.3(*l*) to remove "except the study director" and "designation by testing facility management". Also, we propose adding a sentence "The QAU must be entirely separate from and independent of the personnel engaged in the direction and conduct of the particular study." We propose these changes for clarity and to be consistent with our inclusion of multisite studies and with the statement currently in § 58.35.

Quality Policy: We propose adding a definition for quality policy that is identical to the definition in § 820.3(u), meaning "the overall intentions and direction of an organization with respect to quality, as established by management with executive responsibility."

Raw Data: We propose modifying the current definition in § 58.3(k) to update the regulations to address copying requirements and computerized systems, and to specifically include the pathology report. We propose adding to the definition that raw data means "all nonclinical laboratory study records and documentation or exact copies that maintain the original intent and meaning and are made according to the person's certified copy procedures." This additional regulatory text eliminates the need to provide examples of what we consider a copy. We also propose adding "correspondence" and "other documentation (regardless of capture medium)" to the examples of raw data. The addition of "regardless of capture medium" eliminates the need to provide examples of possible capture media. Also, we propose including as raw data "the signed and dated pathology report" to clarify what we consider as raw data.

Reference Article: We propose adding a definition for reference article consistent with EPA's GLP regulations in 40 CFR 160.3 and 792.3 for defining a "reference substance" to mean an article used to establish a basis for comparison of the test article for known chemical or biological measurements. We propose this addition to acknowledge the use of reference articles in certain studies.

Short-Term Study: We propose adding a definition for short-term study to mean when the in-life period (study period during which data are collected) is completed within several days or, at most, a week. Since the pre-specified, periodic timing of process-based inspections can result in the lack of an inspection of a short-term study, this definition is necessary to address our proposed addition of process-based inspections (see also the discussion of the definition of process-based inspection in section III.B.2.).

Specimen: We propose adding "or retention" to the end of the current definition of specimen in § 58.3(j) to read, "Specimen means any material derived from a test system for examination, analysis, or retention." We propose this change because a specimen may be collected solely for retention purposes. Also, this proposed change is consistent with the definition in the OECD GLP document, *OECD Principles on Good Laboratory Practice* (Ref. 8).

Sponsor: We propose modifying the current definition of sponsor in § 58.3(f) consistent with our proposal to expand the scope of part 58, and to address possible roles of the sponsor in multisite studies. We propose revising the current definition in § 58.3(f)(3) to include the possible roles a sponsor could play in a multisite study in addition to initiating and supporting the study. Those roles and applicable requirements are the same as those for a testing facility, test site, or contributing scientist as we propose to define those terms.

See, also, section III.B.3. where we discuss § 58.5 (Sponsor responsibilities).

Standard Operating Procedures (SOPs): We propose adding a definition for SOPs to mean documented procedures describing how to perform tests or activities normally not specified in detail in study protocols. We propose this addition because many proposed modifications in § 58.31 refer to required SOPs. This definition is consistent with the OECD GLP document, *OECD Principles on Good Laboratory Practice* (Ref. 8).

Study-based Inspection: We propose adding a definition for study-based inspection to mean the same QAU inspection specified currently in § 58.35(b)(3) for inspecting a critical operation of the study that is scheduled according to the study's chronology or sequence of events. Our proposed definition is consistent with the definition for study-based inspection in the OECD consensus document, *Quality Assurance and GLP* (Ref. 7).

Test Article: We propose modifying the current definition of test article in § 58.3(b) to change "medical device for human use" to "device" and to add "tobacco product". As discussed in section III.B.1. concerning the scope of part 58, we propose these changes to broaden devices to include FDA's CVM and to include FDA's jurisdiction of tobacco products.

Test Site: We propose adding a definition for test site to mean a "person" (currently defined in § 58.3(h)) responsible for a phase of a multisite nonclinical laboratory study. We propose that a test site includes management with executive responsibility and supporting SOPs for the conduct of a nonclinical laboratory study. For a different nonclinical laboratory study, a test site could function as a testing facility.

Test System: We propose modifying the current definition of test system in § 58.3(i) to add "reference" article consistent with our other proposed changes. See elsewhere in section III.B.2. for our proposed definition and explanation for adding a definition of reference article.

Testing Facility: We propose removing and replacing most of the current definition of testing facility in current § 58.3(g) to update the regulations consistent with the conduct of multisite nonclinical laboratory studies. Our proposed definition is as follows: "Testing facility means a person responsible for conducting, coordinating, or completing a nonclinical laboratory study, or any combination thereof. The testing facility designates the study director."

We propose this change because, in a multisite study, the testing facility might not be the person treating the test system with the test article as specified in the current definition. Rather, the person treating the test system with the test article might be a contracted or subcontracted person. Therefore, this general definition of a testing facility is necessary to capture all possible contractual relationships in a multisite study.

Validation: We propose adding a definition for validation to mean confirmation by examination and provision of objective evidence that the particular requirements for a specific intended use of a system or process can be consistently fulfilled. This proposed definition is similar to the definition in § 820.3(z), and addresses comments to the December 2010 ANPRM requesting a definition for validation of a system or process.

Vehicle: We propose adding a definition for vehicle to mean any agent that serves as a carrier and is used to mix, disperse, or solubilize the test, control, or reference article for administration or application to the test system. This proposal recognizes the use of vehicles in the conduct of nonclinical laboratory studies. Our proposed definition is consistent with the definition of vehicle in the OECD GLP document, *OECD Principles on Good Laboratory Practice* (Ref. 8), for describing a carrier for test, control, or reference articles.

3. Sponsor Responsibilities (§ 58.5)

The present regulations in § 58.10 cover only a sponsor's responsibilities to notify a consulting laboratory, contractor, or grantee that their service "is part of a nonclinical laboratory study that must be conducted in compliance with the provisions of this part [part 58]". FDA received many comments to the December 2010 ANPRM noting that there are other sponsor responsibilities implicit throughout the present regulations, and stating that the study sponsor must share in the responsibility for complying with part 58. We agree with those comments.

Therefore, we propose adding § 58.5 *Sponsor responsibilities,* that provides explicit provisions for the presently implied sponsor responsibilities and adds new sponsor responsibilities. Our proposed sponsor responsibilities are consistent with the preamble to the original GLP proposed rule stating that the adequacy and validity of nonclinical laboratory tests remain the responsibility of the sponsor of the product as part of establishing the marketability of the product (41 FR

51206 at 51206) (Ref. 4). In addition, we propose adding provisions consistent with the OECD advisory document, *The Role and Responsibilities of the Sponsor in the Application of the Principles of GLP* (Ref. 9).

For each nonclinical laboratory study, we propose that the sponsor must ensure the study protocol meets the requirements specified in § 58.120 (*Protocol* (see proposed § 58.5(a) regulatory text, elsewhere in this document). Also, we propose that the sponsor must ensure the study protocol provides for the humane care of animals[6] (see proposed § 58.5(b)). We propose these additions because the sponsor is responsible for developing the study protocol, either directly or through a contracted person. To indicate the sponsor's approval of the study protocol, we propose that the sponsor must sign and date the study protocol (see proposed § 58.5(c)).

For any phase of a nonclinical laboratory study that includes the use of animals, we propose that the sponsor contract with persons accredited as following appropriate animal welfare procedures. If, for any reason, the sponsor does not use an accredited person for a phase that includes the use of animals, we propose that the sponsor must document the reason for using the non-accredited person. (See proposed § 58.5(d).) If the study supports an application or submission to FDA, we propose requiring in the application or submission the reason for using a non-accredited person, along with supporting information to show the qualifications of that person, such as a copy of SOPs showing the application of current animal welfare laws, regulations, policies, and guidelines. This information must be included in the compliance statement. (See proposed § 58.5(d) and (k).) We are proposing these requirements to help ensure animal welfare concerns are adequately addressed, and to help safeguard the reliability of study results.

A sponsor may transfer to another party responsibility for any or all of the obligations set forth in this part. A party that assumes any obligation of a sponsor must comply with the specific regulations in this chapter applicable to this obligation and must be subject to the same regulatory action as a sponsor for failure to comply with any obligation assumed under these regulations. Although a sponsor might transfer certain responsibilities, the sponsor is still ultimately responsible for compliance with all sponsor responsibilities provided in this chapter. When referring to the sponsor throughout this proposal, we also mean any person that assumes, as an independent contractor with the sponsor, one or more of the obligations of a sponsor.

We propose that the sponsor must document that the contracted person conducting a phase of the nonclinical laboratory study is qualified according to the provisions in part 58 applicable for the phase or phases that person is contracted to perform. (See proposed § 58.5(e).) Using qualified contracted persons is essential for ensuring GLP compliance and the quality and integrity of the resulting data.

We propose adding communication requirements to sponsor responsibilities. The OECD consensus document, *The Application of the OECD Principles of GLP to the Organisation and Management of Multi-Site Studies* (Ref. 6), states that many problems associated with the conduct of multisite studies "can be prevented by clear allocation of responsibilities and effective communication among all parties involved in the conduct of the study." This includes the sponsor, study director, management, principal investigators, QAU, and all other study personnel. Many comments to the December 2010 ANPRM repeat this opinion. We agree and propose that the sponsor must ensure appropriate lines of communication are established (defined, documented in writing or electronically, and implemented) among all persons conducting any phase of the nonclinical laboratory study. We also propose that communications established among persons conducting a phase of the study that involve the sponsor must be documented by the sponsor. (See proposed § 58.5(f).)

We propose that the sponsor must document that test, control, and reference articles are prepared, characterized, and labeled according to part 58, subpart F, and are appropriately shipped. In addition, the sponsor must obtain, and provide to the study director as soon as available, information about test, control, and reference article characterization as specified in § 58.105. (See proposed § 58.5(g).) We propose this requirement in § 58.5(g), because the study director must have characterization information to help ensure appropriate dosing of the test article and to interpret study results in the final study report.

We propose that the sponsor inform the study director of any known potential risks of the test article to human health or to the environment, and any measures necessary to protect study personnel. (See proposed § 58.5(h).) Since the sponsor is most familiar with test article characteristics because of either direct testing or receiving results from a contracted person that characterized the test article, we propose this requirement as a sponsor responsibility. If there are known or suspected risks to human health or the environment, it is essential that the study director, as the single point of study control, is aware of the risks and the measures necessary to protect study personnel and the environment. This is consistent with OECD's advisory document, *The Role and Responsibilities of the Sponsor in the Application of the Principles of GLP* (Ref. 9).

We propose that the sponsor must review, approve, sign, and date each protocol amendment before implementation. (See proposed § 58.5(i).) Many comments to the December 2010 ANPRM recommend this requirement and we agree. After initiating the study, the sponsor must be aware of proposed study protocol changes and why the changes are proposed. This requirement is part of our proposed checks and balances in part 58 and will help ensure that the amended protocol complies with GLP.

We propose that the sponsor must document and update, as necessary, the archive location of all raw data and records described in proposed §§ 58.190 and 58.195. When we conduct BIMO GLP inspections as a result of an application or submission to FDA, we rely on the sponsor to provide the location of the study archives. (See proposed § 58.5(j).)

We propose that the sponsor must include, in any application or submission to FDA that contains the results of a nonclinical laboratory study, the final study report of the nonclinical laboratory study and all amendments to the final report described in proposed § 58.185. Also, we propose that the sponsor must include either a statement that the study was conducted in compliance with the requirements in part 58 or, if not conducted in compliance with part 58, a brief statement of the reason for noncompliance. (See proposed § 58.5(k)). We propose this requirement, consistent with the proposed expansion of the scope, to include all applications and submissions to FDA supported by data from nonclinical laboratory studies.

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[6] The document, "International Guiding Principles for Biomedical Research Involving Animals," last revised in December 2012, advocates among other principles, the "Three Rs" of the ethical use of animals—replacement, refinement, and reduction (Ref. 10). Additionally, the protocol must meet the requirements in § 58.90 for animal care. USDA's Animal Welfare Act regulations (Code of Federal Regulations, Title 9, Chapter1, Subchapter A, Parts 1–4) and the Institute for Laboratory Animal Research's Guide for the Care and Use of Laboratory Animals (Ref. 11), provide specifics regarding the veterinary care expected when animals are used for research.

4. Transfer of Responsibilities (§ 58.10)

We propose significant changes to current § 58.10 to help address the possibility of multiple contractual relationships, including subcontracting, in multisite nonclinical laboratory studies, and to conform as much as possible to the regulations in 21 CFR 312.52, Transfer of obligations to a contract research organization, and 21 CFR 511.1(f), Contract research organizations. Many comments to the December 2010 ANPRM suggest that we specify in part 58 the parties responsible in a multisite study and how any transfer of responsibilities is accomplished. We agree with those suggestions. We also propose the changes because the current regulations address explicitly only testing facilities.

We propose changing the title of § 58.10 from "Applicability to studies performed under grants and contracts" to "Transfer of responsibilities" to reflect the proposed changes to this section. We also propose adding paragraph designations (a), (b), and (c).

In § 58.10(a), we propose to require written documentation of any transfer of responsibilities to a "contracted person", as that term is proposed in § 58.3, referring to any person a sponsor utilizes to provide a service for the conduct of a nonclinical laboratory study. Contracted persons may, for example, serve as the study director, management with executive responsibility, the QAU, a testing facility, a test site, or an independent contributing scientist. These contracted persons may further contract with other individuals or entities. Specifically, we propose that any responsibility required by the regulations that is transferred must be described in writing, and that any responsibility not covered by the written description is considered not transferred.

We propose to add in § 58.10(b) that any person transferring to a contracted person any regulatory responsibility for a phase of a nonclinical laboratory study must inform that contracted person that the transferred responsibility is required to be performed in compliance with the provisions in part 58. Proposed paragraph (b) therefore includes what is currently in § 58.10.

In § 58.10(c), we propose adding that a contracted person assuming any regulatory responsibility for a phase of a nonclinical laboratory study must comply with the regulations in chapter I (21 CFR chapter I) applicable to the transferred responsibility. That contracted person will be subject to the same regulatory requirements as those regulated persons transferring the responsibility.

We propose these requirements for transfer of responsibilities in a nonclinical laboratory study to help ensure contracted persons perform any transferred responsibilities in compliance with part 58 and to help ensure the quality and integrity of data supporting applications and submissions to FDA. Also, our proposal is consistent with industry's desire for flexible relationships among persons conducting phases of a nonclinical laboratory study.

5. Inspection of Any Person Conducting a Phase of a Nonclinical Laboratory Study (§ 58.15)

We propose revising § 58.15 to clarify FDA's inspection authority to include inspecting any person that conducts a phase of a nonclinical laboratory study of an FDA-regulated product. This includes all contracted and subcontracted persons that agree to assume one or more regulatory responsibilities. We propose revising the heading of § 58.15 to be consistent with these proposed changes.

Also, we propose modifying the provision about FDA inspection of QAU records. In the preamble to the original GLP final rule (43 FR 59986 at 59998, December 22, 1978) (Ref. 12) and repeated in FDA's compliance policy guide (CPG 7151.02) (Ref. 13), we state our policy that FDA investigators will not *routinely* inspect QAU records. Exceptions when FDA will inspect QAU records include "for cause" FDA inspections, or inspections conducted under an inspection warrant, or when necessary for litigation purposes. Therefore, we propose modifying § 58.15(a) to specifically state that the "records inspection and copying requirements do not routinely apply to QAU records of findings and problems, or to actions recommended and taken". We propose adding for clarity, that "FDA retains the authority to inspect all QAU records when necessary to ensure compliance with this part [part 58]".

In § 58.15(b), we propose changing certain terms for consistency within this proposal. For example, we propose changing "the testing facility" to "any person conducting a phase of the nonclinical laboratory study".

C. Part 58, Subpart B—Organization and Personnel

1. Personnel (§ 58.29)

We propose no changes to the intent of current § 58.29(a). However, we propose adding to the end of this provision clarifying sentences, "This must include training and experience with GLP requirements. Personnel who work with animals must have both general and species-specific training and experience."

Several comments to the December 2010 ANPRM state that training on GLP requirements is essential for all personnel in a nonclinical laboratory study. This proposed training requirement also is consistent with the personnel requirements in the *OECD Principles on Good Laboratory Practice* (Ref. 8). Therefore, we propose requiring GLP training to ensure all personnel in a nonclinical laboratory study understand how to comply with GLP and all aspects of a nonclinical laboratory study are GLP compliant.

As we state elsewhere in section III.A.3., we propose specific responsibilities regarding animal welfare because compliance with animal care requirements helps ensure the quality and integrity of study data. Therefore, we propose that all personnel involved with animal treatment and care must have relevant training and experience, including species-specific training when applicable.

In § 58.29(b), we propose adding a requirement that all study personnel must have access to and comply with the study protocol and applicable protocol amendments and SOPs, and any protocol deviation must be reported to the study director. In § 58.29(c), we propose adding a requirement that all study personnel must record raw data promptly and accurately as required by a new regulatory provision in § 58.180 Data quality and integrity. We propose these new provisions to help ensure compliance with GLPs and to update the regulations consistent with current practices and the prevalence of multisite studies. This proposal also is consistent with personnel responsibilities in the *OECD Principles on Good Laboratory Practice* (Ref. 8).

In proposed § 58.29(d) (currently, § 58.29(b)), we replace "Each testing facility" with "Any person conducting a phase of a nonclinical laboratory study". We propose this and other conforming changes in § 58.29 to address the occurrence of contracting and subcontracting in multisite studies, to update the regulations, and for consistency with our proposals in part 58.

2. Testing Facility Management With Executive Responsibility (§ 58.31)

We propose significant changes in § 58.31 consistent with our proposal requiring a GLP Quality System. To clarify who is responsible for the proposed requirements in § 58.31, we propose adding "with executive responsibility" to the current heading of "Testing facility management." We propose this change to specify that upper management at a testing facility or test site is ultimately responsible for GLP compliance. We also propose summarizing in the introductory paragraph the expanded responsibilities of management consistent with the regulatory text in part 820 (see § 820.20).

The current provisions in § 58.31(c) through (g) require only assurances that certain activities are available, performed, understood, or communicated. For those responsibilities currently in § 58.31, we propose clarifying and expanding them, requiring actions and referencing specific SOPs (where applicable). We also propose adding new responsibilities consistent with a GLP Quality System and the conduct of multisite studies.

We propose a new § 58.31(a) requiring testing facility management with executive responsibility to establish and update written GLP Quality System SOPs. For continuing oversight of the GLP Quality System, in new § 58.31(b), we propose requiring testing facility management with executive responsibility to review at specified and sufficient intervals and document that the GLP Quality System meets the requirements in proposed part 58. We propose that testing facility management with executive responsibility is responsible for overseeing the implementation of the requirements in proposed § 58.31(b), according to established procedures to be included in proposed § 58.81(b)(2) (establishment and periodic review of a GLP Quality System).

In § 58.31(e), we propose that testing facility management with executive responsibility appoint and document the appointment of a management representative who is a member of the testing facility management with authority over and responsibility for documenting that GLP Quality System requirements are effectively established and maintained. We also propose that this appointed member reports to management with executive responsibility about the performance of the GLP Quality System, which includes reports from the QAU. Appointment of this individual is an organizational responsibility of the testing facility management with executive responsibility such as in part 820, Quality System Regulation, the model for the GLP Quality System.

In § 58.31(f), we propose that testing facility management with executive responsibility is responsible for documenting that all persons in a multisite study follow adequate equipment-related SOPs. In § 58.31(h), we propose this same management is responsible for documenting that all study personnel are trained to perform their assigned functions. In § 58.31(k), we propose this same management is responsible for appointing a person to maintain the master schedule along with other requirements concerning the master schedule, such as requiring in a master schedule the core information presently specified under QAU responsibilities in § 58.35(b)(1). This core information is essential on each master schedule to ensure consistent identification across all persons (individuals or entities) in a multisite study. We propose adding § 58.31(m), requiring testing facility management with executive responsibility to review all protocols to ensure that environmental, animal welfare, or work resource issues or issues with scientific methodology do not affect or bias any phase of the study's conduct.

We propose adding § 58.31(r) to require testing facility management with executive responsibility to review the suitability and effectiveness of the QAU or lead QAU, as applicable, at defined intervals and with sufficient frequency, according to established SOPs as required in proposed § 58.81(b)(17). Periodic review of the QAU's capability to fulfill their responsibilities helps to ensure the quality and integrity of study data and is also consistent with a quality system.

We propose adding § 58.31(u), requiring testing facility management with executive responsibility to establish SOPs for archiving records and materials generated during the course of a nonclinical laboratory study, including the designation and replacement of the archivist and any supporting staff. This archiving process is an essential aspect of compliance with GLPs because maintenance of raw data and specimens from a specific study enables reconstruction of that study for verification of the information in the final study report and confirmation of the study's compliance with part 58.

These and other proposals in § 58.31 are consistent with the preamble to the original GLP final rule that states, "A determination of the adequacy of each standard operating procedure is the responsibility of the management" (43 FR 59986 at 60002) (Ref. 12). Also, our proposals are responsive to many comments to the December 2010 ANPRM asking that we define operational areas necessary for broader adoption of a quality system approach to the conduct of nonclinical laboratory studies.

Rather than specifying how essential activities of a GLP Quality System must be conducted, we propose requiring management with executive responsibility at testing facilities and test sites to establish essential SOPs. This flexible approach would allow testing facilities and test sites to establish SOPs best suited to their specific organizational structure.

3. Test Site Management With Executive Responsibility (§ 58.32)

We propose updating the regulations by adding § 58.32. This new provision would address the current prevalence of multisite studies and require test site management with executive responsibility to comply with relevant requirements in proposed § 58.31 and develop and maintain SOPs described in § 58.81, "where appropriate", as that term is proposed in § 58.1(c).

We expect that a test site, like a testing facility, has management with executive responsibility and appropriate SOPs. Therefore, while a test site might be conducting a phase of a particular multisite study, for a different study the same test site could function as a testing facility by coordinating, conducting, or completing the entire study.

4. Study Director (§ 58.33)

In § 58.33, we propose modifying and adding study director requirements to update the regulations and to address the prevalence of multisite studies. We propose certain study director requirements for consistency with our other proposals in part 58 (for example, our proposals for a GLP Quality System and for checks and balances to help ensure data quality and integrity).

In § 58.33(a), we propose keeping the current requirement that the study director is the single point of study control. We propose adding that the study director cannot delegate overall responsibility for a nonclinical laboratory study. This proposed addition clarifies and emphasizes that a study director cannot delegate oversight of an entire nonclinical laboratory study, even though a study director may delegate to a principal investigator certain responsibilities.

This proposed change is consistent with FDA's longstanding interpretation of a study director's responsibilities and consistent with present FDA and EPA GLP regulations. This proposed addition also is consistent with the OECD consensus document, *The Role and Responsibilities of the Study Director in GLP Studies* (Ref. 14). Many comments to the December 2010 ANPRM stress the importance of the study director remaining the single point of study control.

We propose in § 58.33(a)(2) the study director's responsibility for implementing procedures that ensure adequate communication among all study personnel and with the sponsor, as applicable, because communication is essential in a nonclinical laboratory study.

In § 58.33(b), we propose new requirements for the study director for documenting, consulting, signing, and archiving (see proposed §§ 58.33(b)(2) through (7) and (12) through (14)). In § 58.33(b)(13), we propose that the study director must sign and date the final study report. FDA agrees with OECD's discussion in this regard in both the *OECD Principles on Good Laboratory Practice* (Ref. 8) and the consensus document, *The Role and Responsibilities of the Study Director in GLP Studies* (Ref. 14). The study director's signature on the final study report indicates acceptance of responsibility for the validity of the data and the extent to which the study complies with GLP principles. We also recognize that we use the terms retain and archive interchangeably throughout this proposal (see, for example, proposed § 58.33(b)(14)), and we seek comment on which term is preferred by industry.

We propose adding in § 58.33(b)(5) and (6) new study director responsibilities affecting the welfare of test animals. When a protocol and its amendments impact test animal use, we propose the study director must document that a committee whose function is ensuring the appropriate and humane care of animals must first review and approve the protocol and applicable amendments before initiating the study or implementing the amendments. The study director also must document that such a committee has reviewed and approved general procedures for commonly conducted animal tests. Any protocol requiring only those tests, with their approved parameters, would not require additional review before study initiation. However, if a protocol increases the numbers of animals to be used or alters any of the approved testing parameters, specific review and approval of that protocol would be required before study initiation.

We propose in 58.35(b)(6), that the study director must consult with the attending veterinarian during review of proposed study protocols to determine potential animal welfare concerns and appropriate responses to likely contingencies. Early identification of potential animal welfare concerns benefits the test animals because they will receive prompt care, which improves the quality of the data collected.

In 58.33(b)(11), we propose adding that the study director must document that all applicable GLP regulations are followed and include a study compliance statement in the final study report. FDA agrees with the statement in the OECD consensus document, *The Role and Responsibilities of the Study Director in GLP Studies* (Ref. 14) that the study director should ascertain that GLP requirements are fully complied with in every phase of a study, that the study protocol is faithfully followed, and that all observations, including any deviations from the protocol, are fully documented.

In § 58.33(b)(14), we propose adding a timeframe for archiving of no later than 2 weeks after the study completion date. We think that timely archiving of raw data, documents, protocols, specimens, and final reports will help prevent their loss or destruction. Stakeholders requesting modernizing part 58 asked specifically for a reasonable time period after the study completion date to complete study archiving. Numerous comments to the December 2010 ANPRM agree, particularly with regard to archiving computerized systems. We propose the 2-week timeframe to allow flexibility for archiving material without jeopardizing study material integrity.

5. Quality Assurance Unit (QAU) (§ 58.35)

In § 58.35, we propose keeping the QAU functions currently in the regulations. We propose modifying § 58.35(a) by separating it into paragraph (1) QAU function and paragraph (2) QAU location. We propose this change for consistency with our other proposals in part 58 (for example, to address the location of the lead QAU for multisite studies), and in response to comments to the December 2010 ANPRM requesting a clear description of the relationship between the QAU and testing facility management.

We propose in § 58.35(a)(2)(ii) that, for multisite studies, testing facility management with executive responsibility must designate a lead QAU. The concept of a lead QAU is consistent with the discussion in the preamble of the original GLP final rule stating that when portions of a study must be contracted to a site that lacks a QAU "the person letting the contract, and not the contract facility, is responsible for the performance of the quality assurance functions" (43 FR 59986 at 59997) (Ref. 12). This change also is consistent with the OECD consensus document, *Quality Assurance and GLP* (Ref. 7). Several comments to the December 2010 ANPRM specifically note the need for a lead QAU in multisite studies.

We propose several modifications to current § 58.35(b). We propose changing the present QAU requirement to maintain a copy of the master schedule and all protocols to require that the QAU maintain "access" to them. For example, if the QAU is a contracted person, then the QAU might not have overall knowledge about the person (*i.e.*, testing facility) to which they are providing QA services. However, the QAU requires "access" to the master schedule and protocols to ensure GLP compliance.

We recognize that many sites have a central computerized system for maintenance of essential documents. Our proposed change about QAU access to the master schedule responds to stakeholder requests to modernize part 58 and also to comments to the December 2010 ANPRM. This change also is consistent with our proposal in § 58.195(d) that management with executive responsibility must ensure "maintenance" of the master schedule and copies of study protocols.

Because the lead QAU is responsible for ensuring GLP compliance of all phases of a multisite study, we propose that the lead QAU must maintain access to the master schedule of any person that lacks a QAU. We consider the master schedule an important tool for determining whether a person is capable of conducting a GLP compliant study. For example, a person with numerous scheduled studies still in progress may lack sufficient resources to begin the conduct of a GLP compliant study.

Also, as many comments to the December 2010 ANPRM suggest, we propose removing the word "sheet" from the term "master schedule sheet". We propose removing "sheet" because we do not want to imply that a paper copy is required for electronic systems.

In new § 58.35(b)(3), we propose requiring the QAU to review the study protocol before initiating the study and all protocol amendments before implementing them, along with documenting this review. In new

§ 58.35(b)(4), we propose requiring the QAU to review all SOPs applicable to a given nonclinical laboratory study along with documenting this review. Current regulations state the QAU is "responsible for monitoring each study to assure management that the facilities, equipment, personnel, methods, practices, records, and controls are in conformance" with GLPs (current § 58.35(a)).

Our proposed initial review by the QAU of the study protocol and applicable facility SOPs will help ensure compliance with part 58 from the start of the study. Otherwise, when the study is underway, amendments to the study protocol and SOPs might be needed if QAU inspections reveal compliance deficiencies.

We propose in § 58.35(b)(5) expanding the types of QAU inspections recognized by FDA by adding process-based and facility-based inspections.[7] Many comments to the December 2010 ANPRM request this change consistent with QAU inspections described in the OECD consensus document, *Quality Assurance and GLP* (Ref. 7), specifically supporting an appropriate mix of study-specific and process-based inspections.

However, many comments to the December 2010 ANPRM express concern about how process-based inspection results will be appropriately considered for all relevant studies, particularly when an inspection reveals problems. This concern is especially relevant to any phase involving a short-term study, as we propose to define this term. Process-based inspections are conducted on a prearranged schedule, which is not connected to the timing of any particular nonclinical laboratory study. Therefore, a facility utilizing process-based inspections might conduct a short-term study that is not inspected during its in-life period (that is, during the time data are collected). This concern also is addressed in the OECD consensus document, *The Application of the GLP Principles to Short Term Studies* (Ref. 15).

To ensure that any problem revealed during a process-based inspection is properly captured in the reports of all relevant studies, we propose adding § 58.35(e). This provision requires preparation of a written certification, by the person conducting a phase of the study, whenever a process-based inspection reveals problems. As proposed, this certification requires documenting actions taken to properly inform, and modify (when applicable), reports for all studies impacted by the results of that process or procedure. While a management responsibility, we propose adding this requirement in § 58.35 because of its similarity to the existing requirement in current § 58.35(d) for management to provide an FDA representative, upon request, a certification regarding the implementation of required QAU inspections.

In § 58.35(b)(7) (a redesignation and revision of current § 58.35(b)(4)), we propose expanding the requirement that the QAU must submit to management with executive responsibility and the study director a periodic written status report on each study. We propose that these periodic reports "discuss the overall progress and compliance status of the study and include any problems observed and the corrective actions taken." In conjunction with this requirement, we propose that the content and frequency of these reports be specified in SOPs as required in proposed § 58.81(b)(21).

We propose this revision in § 58.35(b)(7) because feedback to management with executive responsibility and the study director about the overall progress and compliance status of the study is essential to ensure study compliance. We intend these periodic reports to give a general overview of the study. We expect these periodic reports to complement any inspection reports for the study, which only provide a snapshot in time.

We are interested in receiving feedback about the use and relevance of periodic status reports. Specifically, we are seeking comment about whether QAUs regularly provide such reports and whether they are useful to the study director and management when provided.

Consistent with our proposals addressing multisite studies, we propose adding in new § 58.35(b)(8) (revision of current § 58.35(b)(5)) that the lead QAU must identify all deviations occurring in the entire study, including deviations identified by any other existing QAUs participating in the study. We expect this requirement may be facilitated by principal investigator reports to the study director, documentation by other existing QAUs, and direct oversight by the lead QAU of independent contributing scientists and any persons conducting a phase of the study lacking either a principal investigator or a QAU or both. We propose this requirement to ensure the lead QAU is made aware of protocol deviations in a timely manner. This awareness will help alert the lead QAU to the need to correct or modify relevant SOPs and the study protocol when necessary to maintain data integrity.

The remaining additions we propose in § 58.35 relate to QAU oversight of the integrity of data in the final study report. Current responsibilities in § 58.35(b)(6) (revised and redesignated as § 58.35(b)(10)) are to ensure the quality and integrity of the final study report. Therefore, we propose in § 58.35(b)(9)that the QAU must audit the reports of all contributing scientists and all existing principal investigators.

Currently § 58.35(b)(6) requires the QAU to assure that the "reported results accurately reflect the raw data of the nonclinical laboratory study." However, QAU members might not have the scientific judgment needed for evaluating the scientific merits of the final report and determining whether the results accurately reflect the data. In the preamble to the original GLP final rule (43 FR 59986 at 59998, comment 90) (Ref. 12), we agreed that "the QAU should not attempt to evaluate the scientific merits of the final report." Therefore, in § 58.35(b)(9) and (10), we propose clarifying our intent.

Specifically, we propose that the QAU must audit all contributing scientists' reports and any report amendments to ensure they include a report of all data and reflect the protocol, and amendments, and applicable SOPs. This requires that all data generated during the study are included and discussed, which is essential for the full transparency necessary for reconstruction of the study.

For multisite studies, we propose that other QAUs participating in the study must audit the reports and report amendments of any principal investigators and all contributing scientists for whom they are responsible. We also propose in § 58.35(b)(9), for any person that lacks a QAU, that the lead QAU audits the reports and amendments of all contributing scientists and any principal investigators. This includes audits of any independent contributing scientist. This proposed requirement will ensure all data from a nonclinical laboratory study will receive QAU review, thus improving the quality and integrity of the final study report.

In § 58.35(b)(10), we propose that the QAU must verify that all original and amended signed and dated reports from contributing scientists are appended to the final study report. For multisite studies, we propose that the lead QAU is responsible for this requirement. Under existing regulations that require providing the final study report and any amendments, we expect that both original and amended versions of reports from all contributing scientists be appended to the final study report. The proposed changes make this expectation a specific requirement. This requirement will allow the study sponsor and FDA reviewers to have access to the original conclusions for each phase and any modifications made as a result of interactions among those involved with the study. We propose this requirement to address the potential inadvertent or intentional introduction of bias that may result when only the final amended version of contributing scientists' reports are included.

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[7] The term "study-based inspection" is not used in current FDA regulations; however, this type of inspection is equivalent to the QAU inspection currently required in part 58.

6. Contributing Scientist (§ 58.37)

As discussed in section III.B.2., we propose adding a definition for a contributing scientist. In that definition, we include an independent contributing scientist as an individual expert or specialist who is an independently employed contracted person. We propose adding responsibilities for contributing and independent contributing scientists to help facilitate the development of a GLP Quality System. To describe the responsibilities of these positions, we propose adding § 58.37(a) and (b), respectively.

When a contributing scientist is responsible for a phase, we propose in § 58.37(a) that the contributing scientist must comply with part 58; provide a signed and dated report for inclusion in the final study report; and permit oversight by the designated QAU. (See proposed § 58.37(a)(1) through (3)).

In § 58.37(b), we propose requirements for an independent contributing scientist in addition to those requirements in § 58.37(a). The proposed requirements in § 58.37(b) include, among others, that independent contributing scientists must document, maintain, and update information about their education, training, and experience related to their responsibilities for a particular phase. Also, we propose they must archive all materials as required by the protocol and by proposed § 58.195.

Our proposal for adding § 58.37 is consistent with the expectations in the present regulations for individual scientists and professionals. We propose these requirements in part to help clarify the regulations.

7. Principal Investigator (§ 58.39)

We propose adding § 58.39 to include principal investigator requirements related to a principal investigator's responsibilities for a phase of a nonclinical laboratory study. We propose that designating a principal investigator is optional.

The *OECD Principles on Good Laboratory Practice* (Ref. 8) includes the term principal investigator solely in reference to multisite studies. We recognize, however, the possibility of a testing facility employing a principal investigator for a single-site study. For example, a single-site study conducted in a facility situated on a large campus with multiple buildings might have one or more principal investigators.

We also recognize that a testing facility may conduct a multisite study where, at all sites, only the study director oversees the study. Several comments to the December 2010 ANPRM note these various practices. We therefore propose in § 58.39 principal investigator requirements for specific responsibilities in one or more phases as delegated to the principal investigator by the study director.

We propose principal investigator responsibilities consistent with a principal investigator's role of ensuring compliance with part 58 for a specific phase. For example, we propose the principal investigator must document and report to the study director all deviations the principal investigator observes during the conduct of the study. These requirements also are consistent with the responsibilities of a principal investigator in *The Application of the OECD Principles of GLP to the Organisation and Management of Multi-Site Studies* (Ref. 6), and with a GLP Quality System.

D. Part 58, Subpart C—Facilities

1. General (§ 58.41)

In § 58.41, we propose changing "Each testing facility shall be" to "Any person conducting a phase of a nonclinical laboratory study must have facilities" of suitable size and construction to facilitate the proper conduct of nonclinical laboratory studies. We propose this change to include multisite studies.

2. Animal Care Facilities (§ 58.43)

In § 58.43, we propose changes to include multisite studies and to cover any phase involving the use of animals. We propose these changes consistent with our proposal revising the testing facility definition and our goal of applying the GLP regulations to all nonclinical laboratory studies, including multisite studies.

3. Facilities for Handling Test, Control, and Reference Articles (§ 58.47)

In § 58.47 we propose adding "reference" to refer to "reference articles" for consistency with our other proposals.

E. Part 58, Subpart D—Equipment

1. Equipment Design (§ 58.61)

In § 58.61, we propose adding that equipment includes computerized systems. We also propose adding in § 58.61, equipment used for maintenance, archiving, and retrieval of data. We propose these additions to update and clarify the regulations.

2. Maintenance and Calibration of Equipment (§ 58.63)

In § 58.63, we propose adding to paragraph (a) maintenance, archiving, and retrieval of data. In paragraph (b), we propose changing the citation reference from § 58.81(b)(11) to (14) and adding a reference to the written SOP requirement in § 58.81(b)(15). Also, in paragraph (b), we propose adding "as applicable" to address the possibility of a multisite study. We propose these changes for consistency with our other proposed changes in part 58 and to update the regulations to address multisite studies.

F. Part 58, Subpart E—Nonclinical Laboratory Study Operations

Consistent with our proposals in part 58 to address multisite studies, we propose revising the heading of subpart E from "Testing Facilities Operation" to "Nonclinical Laboratory Study Operations". Also, accordingly, we propose modifying the sections in subpart E.

1. Standard Operating Procedures (SOPs) (§ 58.81)

We propose modifying § 58.81 Standard operating procedures (SOPs), consistent with our proposals for a GLP Quality System and to address multisite studies. In § 58.81(a), we propose adding to the current requirement that a testing facility must have written SOPs, that all test sites, too, must have written SOPs. Also, in § 58.81(a), we propose changing "management" to "management with executive responsibility".

In § 58.81(b), consistent with our proposal in § 58.81(a), we propose adding that the testing facility and all test sites must establish SOPs for an applicable phase of a nonclinical laboratory study. As discussed in section III.B.1., we use the terms "applicable phases" and "where appropriate" because in a multisite study no one person will conduct all phases of the study. Therefore, each person requires SOPs only for those phases which that person conducts.

We propose adding to the current list of SOPs in § 58.81(b) numerous topics that require SOPs. For example, we propose adding that SOPs must include an SOP for preparing, modifying, and administering all SOPs. We propose these additional SOP requirements because they are essential components of a complete quality system approach (*i.e.*, the proposed GLP Quality System) and also address the current prevalence of multisite studies.

Our proposal in § 58.81 will require initial efforts by testing facilities and test sites to modify or add SOPs as needed for a GLP Quality System. However, once established, the GLP Quality System will facilitate greater flexibility and efficiency for the conduct of nonclinical laboratory studies and, over time, will help reduce costs.

2. Animal Care (§ 58.90)

In § 58.90, we propose modifying paragraph (b) to require, throughout the study, evaluation of the health status of test animals according to acceptable veterinary medical practices for the care of test animals. We propose this change because proper animal care is essential during the entire study to ensure the welfare of test animals and the integrity of test results. However, test animal evaluations can be performed by the attending veterinarian or appropriately-trained personnel who are delegated this responsibility by the attending veterinarian.

In § 58.90(c), we propose removing from the third sentence the phrase "provided that such treatment does not interfere with the study", and replacing this phrase with "as deemed necessary by the study's attending veterinarian." We propose few changes in § 58.90(d) and (e). In the first sentence of current § 58.90(d), we propose replacing "excluding suckling rodents" with "except nursing neonates" to update the regulation to be more inclusive and appropriate. In § 58.90(e), we propose adding the word "reference" to conform to changes proposed elsewhere in this document.

We propose these changes in § 58.90 to update and clarify the regulations, and because test animal welfare concerns are an essential part of a GLP Quality System.

G. Part 58, Subpart F—Test, Control, and Reference Articles

We propose adding the term "Reference" to the heading in subpart F, and in certain applicable provisions in subpart F. We also propose adding in subpart F specifics concerning tobacco products, and a reference to method validation.[8]

1. Test, Control, and Reference Article Characterization (§ 58.105)

We propose modifying § 58.105 to require that all information about test, control, and reference article characterization be provided to the study director as soon as available. This information is necessary for determining appropriate dosing and drafting conclusions in the final study report. The lack of this information limits the important test result discussion in the final study report.

Reports submitted to FDA must provide study information based on the characteristics of the product (test article) studied. We expect a test article to be characterized to the extent required to interpret the study properly. For nonclinical laboratory studies conducted in support of initiating clinical "first-in-human" studies, this characterization information is particularly important for human subject protection.

We propose modification of § 58.105(a) to exclude the use of a marketed tobacco product's labeling to characterize such a product if it is used as a control or reference article in a nonclinical laboratory study. The labeling of currently marketed tobacco products does not provide the information required for full product characterization. That is, the chemical composition (including mainstream smoke composition), microbiological composition, and design parameters of the product are not fully described in tobacco product labels. Thus, the composition and toxicant deliveries of currently marketed tobacco products are less well defined in tobacco product labeling than the safety and efficacy information described in the labels of marketed drug products. Therefore, FDA notes that when using a marketed tobacco product as a control or reference article, the marketed tobacco product's characteristics must be determined and documented as required in this part.

We propose revising and redesignating the current provisions in § 58.105(b), (c), and (d). These proposed changes are necessary for consistency with our other proposals in part 58, such as the addition of reference articles.

The current regulations imply that empty containers from test articles must be retained. Comments to the December 2010 ANPRM did not see the need to retain the empty containers provided appropriate product information is maintained and test article accountability is fully documented. We agree with those comments and propose to remove this implied requirement. To provide for adequate test article accountability, in lieu of retaining empty test article containers, we propose requiring in § 58.105(d) that the study director verify and document by dated signature the distribution and final disposition of the test article.

2. Test, Control, and Reference Article Handling (§ 58.107)

We propose minimal conforming changes in § 58.107, such as adding "reference" to the section heading and first sentence.

3. Mixtures of Articles with Carriers (§ 58.113)

We propose modifying § 58.113 by adding "reference" to the provisions proposed in § 58.113(a), (a)(1), (a)(2), (b)(2), and (d). Also, we propose requiring that the results from the determination of the uniformity, concentration, and stability of mixtures of test articles with carriers are provided to the study director as soon as available. We propose these changes in § 58.113 for the same reasons we propose changes in § 58.105.

H. Part 58, Subpart G—Protocol for and Conduct of a Nonclinical Laboratory Study

1. Protocol (§ 58.120)

We propose modifying § 58.120 to address multisite studies more specifically, and to provide consistency with our other proposed changes discussed elsewhere.

Many comments to the December 2010 ANPRM suggest that the study protocol identify all sites participating in a multisite study. We agree, and propose adding in § 58.120(a)(3) that the protocol contain contact information for all persons conducting a phase of the nonclinical laboratory study.

Current § 58.120(a)(6) includes in the protocol the methods for controlling bias. We propose adding to this provision the analysis and reporting of study test results and procedures to be followed if a study includes a peer review of any phase. Also, for multisite studies, we propose adding a requirement that the protocol identify the person(s) conducting the phases of the nonclinical laboratory study.

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[8] There is a draft guidance document regarding bioanalytical method validation, "Bioanalytical Method Validation Draft Guidance" (Ref. 16). When final, this guidance will provide FDA's current thinking. We consider many of the general principles in this draft guidance document applicable to method validation in nonclinical laboratory studies.

We propose expanding current § 58.120(a)(10) to clarify that the protocol must include a listing of the study-specific records that are required to be maintained. We think this clarification will help assure that study-specific records are maintained.

Current § 58.120(a)(11) requires the date of protocol approval by the sponsor, and the dated signature of the study director. We propose expanding this provision to indicate study protocol approval by the dated signature of the study sponsor, the study director, independent contributing scientists, principal investigators, and any other person conducting a phase of the nonclinical laboratory study, as applicable.

We propose redesignating and modifying § 58.120(b) as § 58.120(d). In § 58.120(d), we propose requiring, before implementing any change or revision to an approved protocol, that the study sponsor and the study director document their approval of the change or revision. For a multisite study, any person affected by the proposed changes (for example, the principal investigator or independent contributing scientist) also must document approval. We consider a person's dated signature on the protocol revision to be acceptable documentation indicating approval. We propose that these signed and dated protocol amendments must be maintained with the protocol.

Before initiating any study using animals, we propose requiring in new § 58.120(b) protocol review and approval by "a committee whose function is to ensure that the care and use of animals in studies is appropriate and humane". In new § 58.120(e), we propose the same review and approval by this committee before implementing any protocol changes that affect animal welfare. These additions are consistent with the proposal in § 58.33(b)(5) that the study director must ensure that all studies that include the use of animals are approved by such a committee.

In new § 58.120(c), we propose requiring that the study sponsor and testing facility management with executive responsibility sign and date a statement that the study will be conducted in compliance with part 58. We propose appending this statement to the protocol. This proposal is consistent with the requirement in § 58.10(b) that a sponsor must inform a contracted person that the study must be conducted in compliance with chapter I. This proposal also is consistent with the requirements discussed elsewhere in this document that the study director documents applicable GLP regulations are followed (section III.C.4.), and that the QAU ensures studies conform to the regulations in part 58 (section III.C.5.).

2. Conduct of a Nonclinical Laboratory Study (§ 58.130)

We propose redesignating current § 58.130(a) through (c), as (d), (f), and (g) respectively. In new proposed § 58.130(a), we require demonstration that all analytical methods are accurate, sufficiently precise, and sensitive enough to result in accurate and reproducible data. We expect this requirement will help ensure data quality and integrity as its intent is to produce accurate and reproducible data. This requirement also is consistent with requirements in part 320 (21 CFR part 320), "Bioavailability and Bioequivalence Requirements" (see § 320.29(a)).

In new § 58.130(b), we propose conducting test, control, and reference article characterization as specified in part 58, subpart F. We propose this requirement to clarify our current and future expectations regarding test, control, and reference article characterization.

In new § 58.130(c), we propose that "humane care and ethical treatment of test animals must be considered in advance and upheld in conjunction with achieving study objectives." We propose this provision is consistent with our other proposals addressing animal welfare discussed elsewhere in section III.A.3.

In new § 58.130(e), we propose that any change to the protocol must be approved as an amendment. We propose this requirement consistent with the proposed requirement in § 58.120(d) for approval of protocol amendments. However, we understand the importance of test animal welfare along with maintaining the integrity of the study. Therefore, FDA intends to evaluate on a case-by-case basis certain circumstances when a protocol deviation is necessary to prevent a potential hazard to animal welfare or study integrity.

In proposed § 58.130(h) (revised and redesignated current § 58.130(d)), postmortem observations must be available to the pathologist unless specified otherwise in the study protocol. We understand that some study protocols might blind the pathologist to postmortem observations. We expect, however, in most cases the pathologist will not need to be blinded to postmortem observations.

I. Part 58, Subpart J—Records and Reports

1. Data Quality and Integrity (§ 58.180)

We propose adding a new § 58.180 for data quality and integrity. Ensuring data quality and integrity in a nonclinical laboratory study is one of our critical goals in this part 58 proposal. Therefore, we propose adding this separate § 58.180 to clearly identify requirements for data quality and integrity. We propose this new section in subpart J because data are part of study records and reports.

We propose moving to this new section, and revising, the requirements in current § 58.130(e). In § 58.180(a), we propose creating the acronym "ALCOA". This is a mnemonic that signifies quality data to stakeholders that conduct clinical and nonclinical studies. We propose therefore that all nonclinical laboratory study data are "accurate, legible, contemporaneous, original, and attributable".

In § 58.180(b), we propose modifying and updating the provisions currently in § 58.130(e) to address electronic data capture and maintenance. Numerous comments to the December 2010 ANPRM note that part 11 (21 CFR part 11, "Electronic Records; Electronic Signatures") is applicable to part 58 and therefore parts 11 and 58 should be consistent. We agree, and do not intend to duplicate in part 58 the requirements in part 11. As a result, we propose that electronic records systems need to be compliant with applicable regulations.

In § 58.180(c), we propose adding that the final study report must contain all data accrued during the study. This proposed requirement is consistent with our proposal in § 58.120(b)(6) requiring that the protocol describe methods for controlling bias. We propose this requirement because selective data inclusion in the study analysis could introduce bias into the final study report.

2. Reporting of Nonclinical Laboratory Study Results (§ 58.185)

Study data must be maintained in a manner that allows for "reconstruction of the study for the purpose of assessing the quality and integrity of the results or the reinterpretation of the data in the light of later findings" (41 FR 51206 at 51215) (Ref. 4). Study records and reports required in part 58, subpart J, are acceptable in electronic or paper medium, or a combination of both. In § 58.185, we propose eliminating any current requirements that might impede a fully computerized facility.

Many comments to the December 2010 ANPRM suggest we allow testing facilities to develop an integrated final study report. This integrated final study report would be in lieu of individual scientists' reports, which the study director must then compile and discuss in an integrated final study report. The preamble to the original GLP final rule states that individual reports are required as part of the final report to ensure the findings of the individual scientists are accurately reflected (43 FR 59986 at 60009) (Ref. 12). Also, in the preamble to the 1987 final rule amending part 58, FDA thought that reports combining data, information, and views from scientists of different disciplines would obscure the individual scientist's accountability for accurate reporting (see 52 FR 33768 at 33778).

We continue to affirm these statements. However, we support processes used for the efficient review of the draft study report to facilitate completion of the final study report.

In § 58.185, we propose adding general statements for consistency with our other part 58 proposals. We propose adding two provisions specific to animal welfare. In § 58.185(a)(2), we propose requiring that final study reports contain the names of all study attending veterinarians. We propose redesignating and modifying § 58.185(a)(9) as (a)(10) to add the example of "all health-related issues reported by an attending veterinarian or appropriately designated personnel during the course of the study". This provision recognizes that circumstances affecting the quality and integrity of the data could include health-related issues noted and reported by the attending veterinarian or appropriately designated personnel. We propose this addition to help ensure that all untoward health-related observations of test animals are captured and reported so that FDA reviewers can consider their possible effect on study results.

We propose redesignating and modifying § 58.185(a)(12) as (a)(13) to be consistent with the EPA's GLP regulations (see 40 CFR 160.185(a)(12) and 792.185(a)(12)). That is, we propose requiring a signed and dated report from each person conducting an analysis or evaluation of study data or specimens after data generation was completed. We propose this addition to provide transparency regarding the review of study findings and the development of conclusions submitted in the final study report.

In new § 58.185(a)(16), we propose that the study director provide with the final study report a statement about the study's extent of compliance with part 58, including any study deviations. This requirement is consistent with OECD's consensus document *The Role and Responsibilities of the Study Director in GLP Studies* (Ref. 14) and addresses a recommendation from stakeholders who requested that FDA modernize part 58.

Many testing facilities provide services internationally and therefore, this statement is commonly seen in final study reports submitted to FDA. Such a statement also is included in EPA's study profile templates, which outline the necessary documents for submission of supporting data.[9] FDA presently requires such a compliance statement from the applicant for applications and submissions for research and marketing and frequently receives the study director's statement in fulfillment of, or at least as the primary basis for, the required statement.

Several comments to the December 2010 ANPRM suggest modifying part 58 to include requirements for studies discontinued before completion. In response to this suggestion, we propose new § 58.185(d) requiring the study director to write, sign, and date a short written summary report closing the study and discussing why the study was discontinued. This report and study material must be archived as required in § 58.190 in case of future study review or study completion.

3. Storage and Retrieval of Records and Data (§ 58.190)

We propose modifying § 58.190(a) to add reserve samples to those items generated as a result of a nonclinical laboratory study that must be retained. We also propose adding a requirement for retention of "Correspondence and other documents relating to interpretation and evaluation of data, other than those documents contained in the final study report." We propose this addition to harmonize with the EPA GLP regulations (see 40 CFR 160.190(a) and 792.190(a)) and to clarify our requirement for retaining these documents.

Our other proposed modifications in § 58.190 provide timeframes for archiving required study material and requirements for the SOPs about archiving to include procedures specific to removing study material from the archives. Stakeholders who asked that we modernize part 58 requested a reasonable timeframe after the study completion date to complete study archiving. Comments to the December 2010 ANPRM also made this request. The SOP requirement for procedures specific to removing study material from the archives is to address concerns that material in the archives could be lost or destroyed if removed without having in place adequate and specific procedures.

We propose that archiving occur no later than 2 weeks after the study completion date (see study completion date defined in § 58.3). We propose this 2-week timeframe to prevent required material from being inadvertently misplaced, lost, or destroyed over the long term. We understand that certain situations may prevent archiving study material during, or at the completion of, a nonclinical laboratory study as currently required of the study director in § 58.33(f).

We also propose, when the study sponsor delays finalizing the final study report, that the study director must complete, sign, and date the final study report and archive all study material no later than 6 months after completion of the last draft of the final study report. Additionally, if the study sponsor stops a nonclinical laboratory study before all protocol requirements are complete, a decision about discontinuing the study must be made no later than 6 months after stopping the study. For discontinued studies, a summary report and study material must be archived within 2 weeks of the study director signing the summary report. We propose these timeframes to provide the requested flexibility without compromising the integrity of study material.

4. Retention of Records (§ 58.195)

We propose modifying § 58.195(b) to conform with§ 58.190(a) for the listing arrangement. We also propose modifying § 58.195(b)(1) to address those applications and submissions to FDA that might not result in an approval, clearance, or a premarket authorization. We therefore propose adding an additional required retention period from the date an application or submission is administratively closed by FDA. "Administratively closed" includes those applications and submissions closed administratively with or without a decision.

In § 58.195(h), we propose adding a statement recognizing that a change of archive location may be due to reasons other than closure of a testing facility. For example, changes in ownership as well as changes in physical location would change the archive location. We also propose including a timeframe of "no later than 10 working days after the transfer occurs" for reporting to FDA and the study sponsor a change in archive location.

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[9] A link to those templates is provided in the Pesticide Registration Notice 2011–3 "Standard Format for Data Submitted Under the Federal Insecticide, Fungicide, and Rodenticide Act and Certain Provisions of the Federal Food, Drug, and Cosmetic Act" (Ref.17).

We propose this timeframe to ensure that FDA is informed of the location of study materials if a GLP BIMO inspection of the study is warranted. This requirement is necessary to prevent waste of inspectional resources and delay in receiving FDA inspectional findings, which provide FDA reviewers information about data quality and integrity.

Other proposed changes to § 58.195 are for consistency with our proposals throughout this document and to update the regulations consistent with current practices.

J. Part 58, Subpart K—Disqualification of Any Person Conducting a Phase of a Nonclinical Laboratory Study

We propose modifying subpart K to extend the authority of the Commissioner of Food and Drugs to disqualify any person conducting a phase of a nonclinical laboratory study upon finding either or both of the conditions for disqualification in the proposed revisions in § 58.202. We propose adding any person conducting a phase of a nonclinical laboratory study for consistency with other modifications throughout this proposal.

We propose modifying § 58.202 to clarify the conditions for disqualification. To help provide uniformity in FDA regulations, we propose adding as a basis for initiating disqualification proceedings the repeated or deliberate submission of false information in any required report. FDA intends to reserve disqualification for the rare case when the rejection of a particular study is an inadequate regulatory response (see 43 FR 59986 at 60011) (Ref. 12).

In addition, we propose to amend the current provision in § 58.206(a) so that a person disqualified under part 58 would no longer be eligible to receive a test article under part 511, New Animal Drugs For Investigational Use. A clinical investigator who is ineligible to receive a test article under part 511 also would be ineligible to conduct any nonclinical laboratory study that is intended to support an application for a research or marketing permit.

For certain FDA-regulated products, such as new animal drugs, the study subjects are animals in both "nonclinical laboratory studies" and "clinical investigations." In the new animal drug approval process, nonclinical laboratory studies, such as those that target animal safety and human food safety, may be essential in determining whether to approve an application for a research or marketing permit for a new animal drug. For new animal drugs, the same clinical investigator could conduct both nonclinical laboratory studies and clinical investigations. Therefore, we propose this action to help protect the safety and welfare of animal research subjects involved in FDA-regulated nonclinical laboratory studies and clinical investigations, and to help ensure the reliability and integrity of the data submitted to FDA to support FDA decisions concerning new animal drugs.

Concurrent with this proposal, FDA is publishing elsewhere in this issue of the **Federal Register** a proposal to amend § 511.1(c), to expand the scope of clinical investigator disqualification under part 511. Under the current regulations, a clinical investigator disqualified by the Commissioner is ineligible to receive the particular type of test article regulated under that part (*e.g.* new animal drugs in § 511.1(c)) and is ineligible to conduct any clinical investigation that supports an application for a research or marketing permit for products regulated by FDA. Under the proposed amendment to part 511, a clinical investigator disqualified under part 511 also would be ineligible to conduct any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug.

When a clinical investigator is disqualified pursuant to part 511, the basis for that disqualification typically is the repeated or deliberate submission of false information to FDA or a sponsor in any required report. For new animal drugs, the same investigator could conduct both nonclinical laboratory studies and clinical investigations. The proposed amendment to part 511 would make a clinical investigator disqualified under part 511 ineligible to conduct any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug. In addition, the proposed amendment to part 511 would help to provide consistency for disqualification proceedings in parts 58 and 511.8.

Other proposed provisions in §§ 58.200, 58.202, 58.204, 58.206, 58.210, 58.213, 58.215, and 58.217 are for clarity and consistency with our proposals throughout this document. In § 58.210, when a study is determined to be unacceptable, we propose to eliminate from consideration data in support of the application or submission to FDA, as defined in proposed § 58.3. We also propose to add that such elimination may serve as new information justifying appropriate regulatory action not limited to termination or withdrawal of approval.

We propose modifying § 58.219 to reference § 58.210(b) and to require an FDA inspection of a disqualified person before reinstatement can be considered. Presently, § 58.219 states that the Commissioner "may" require such an inspection. Before a request for reinstatement can be appropriately considered by FDA, we propose requiring an inspection. This inspection would help provide additional information about the disqualified person that may be relevant to the consideration for reinstatement.

IV. Regulatory Hearing Before FDA

We propose to add to 21 CFR 16.1(b)(2) a new provision for 21 CFR part 58, subpart K relating to disqualifying any person that conducts a phase of nonclinical laboratory studies of FDA-regulated products.

V. Analysis of Environmental Impact

The Agency has determined under 21 CFR 25.30(h) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

VI. Legal Authority

Legal authority to issue good laboratory practice regulations exists under section 701(a) of the FD&C Act, as essential to enforcement of the Agency's responsibilities under sections 402, 406, 408, 409, 501, 502, 503, 505, 510, 512–516, 518–520, 571, 721, 801, 905, 910, and 911 of the FD&C Act; and, sections 351 and 354–360F of the PHS Act.

VII. Proposed Implementation Plan

FDA proposes that any final rule that may issue based on this proposal become effective 1 year after the date of publication of the final rule in the **Federal Register**.

VIII. Economic Analysis of Impacts

A. Introduction

We have examined the impacts of the proposed rule under Executive Order 12866, Executive Order 13563, the Regulatory Flexibility Act (5 U.S.C. 601–612), and the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4). Executive Orders 12866 and 13563 direct Agencies to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity). We have developed a comprehensive Economic Analysis of Impacts that assesses the impacts of the proposed rule. We believe that this proposed rule is not a significant regulatory action as defined by Executive Order 12866.

The Regulatory Flexibility Act requires Agencies to analyze regulatory options that would minimize any significant impact of a rule on small entities. Because the proposed requirements are likely to impose a significant burden on small entities employing fewer than 10 workers in "Dental Equipment and Supplies" (between 1.87 and 8.94 percent of average annual sales), we find that the proposed rule would have a significant economic impact on a substantial number of small entities, but the impacts are uncertain.

Section 202(a) of the Unfunded Mandates Reform Act of 1995 requires that Agencies prepare a written statement, which includes an assessment of anticipated costs and benefits, before proposing "any rule that includes any Federal mandate that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100,000,000 or more (adjusted annually for inflation) in any one year." The current threshold after adjustment for inflation is $146 million, using the most current (2015) Implicit Price Deflator for the Gross Domestic Product. This proposed rule would not result in an expenditure in any year that meets or exceeds this amount.

B. Summary

This proposed rule would amend the regulations regarding GLPs and would require that nonclinical laboratory studies (sometimes referred to as preclinical studies) follow a complete quality system approach, referred to as a GLP Quality System, when safety and toxicity studies support or are intended to support applications and submissions to FDA. The proposed rule would expand the scope to include all products for which nonclinical laboratory studies are currently conducted that are not explicitly discussed in the current regulations, specifically tobacco products. The proposed expanded scope also includes all applications and submissions under the FD&C Act that can be supported by the results of nonclinical laboratory studies. In addition, the proposed rule would introduce and modify definitions, terms, and organizational and personnel roles and responsibilities consistent with the implementation of the proposed GLP Quality System and the prevalence of multisite studies. Finally, the proposed rule would incorporate wording consistent with some of the existing domestic and international guidelines, rules or regulations covering good laboratory practices such as those established by the OECD.

Costs of the rule, when final, would include annual and one-time costs. Annual costs would include the additional reporting and recordkeeping responsibilities required under the proposed GLP Quality System. One-time costs include reading and understanding the rule, updating existing SOPs, writing new SOPs, and training. Combined, all costs annualized over a ten-year period at a 7-percent discount rate are estimated to range between $34.4 million and $69.3 million, with an average annualized cost of $51.9 million. By contrast, with a 3 percent discount rate, annualized cost would range from $34.2 million to $68.9 million, with an average annualized cost of $51.5 million.

Conducting nonclinical laboratory studies under the proposed GLP Quality System is expected to improve the reliability and quality of the data that support applications and submissions to us, including those applications and submissions that lead to the use of new medical products in first-in-human clinical studies. In addition, the proposed system is conducive to improving compliance and accountability by all involved in the conduct of nonclinical laboratory studies.

As described, we understand the potential effects on small entities. We therefore seek comment, particularly from small entities, about the proposed effective date of 1 year after the date of publication of any final rule that may issue (see section VII. Proposed Implementation Plan).

The full discussion of economic impacts is available in docket FDA–2010–N–0548 at *http://www.regulations.gov* and at *http://www.fda.gov/AboutFDA/ReportsManualsForms/Reports/EconomicAnalyses/default.htm* (Ref. 18).

Table 1 summarizes the costs and benefits.

TABLE 1—SUMMARY OF BENEFITS, COSTS AND DISTRIBUTIONAL EFFECTS OF PROPOSED RULE [1]

Category	Primary estimate	Low estimate	High estimate	Units			Notes
				Year dollars	Discount rate (%)	Period covered (years)	
Benefits:							
Annualized	....	....	....	2014	7	10	
Monetized $millions/year	....	....	....	2014	3	10	
Annualized	....	....	....	2014	7	10	
Quantified	....	....	....	2014	3	10	
Qualitative	The proposed rule would clarify GLP standards to facilitate a more consistent approach and provide greater international consistency. As a result, we anticipate improvements in the integrity and quality of data submitted for FDA review decisions.						
Costs:							
Annualized	$51.9	$34.4	$69.3	2014	7	10	
Monetized $millions/year	51.5	34.2	68.9	2014	3	10	
Annualized	....	....	....	2014	7	10	

TABLE 1—SUMMARY OF BENEFITS, COSTS AND DISTRIBUTIONAL EFFECTS OF PROPOSED RULE [1]—Continued

Category	Primary estimate	Low estimate	High estimate	Units			Notes
				Year dollars	Discount rate (%)	Period covered (years)	
Quantified	....	....	....	2014	3	10	
Qualitative							
Transfers:							
Federal	....	....	....	2014	7	10	
Annualized	....	....	....	2014	3	10	
Monetized $millions/year	From:			To:			
Other	....	....	....	2014	7	10	
Annualized	....	....	....	2014	3	10	
Monetized $millions/year	From:			To:			
Effects:	State, Local or Tribal Government: None estimated. Small Business: The proposed requirements would likely impose a significant burden on small entities employing fewer than 10 workers in "Dental Equipment and Supplies" (between 1.87 and 8.94 percent of average annual sales). However, we do not have data on how many of these dental-equipment small entities perform nonclinical laboratory studies to support, or intended to support, an application or submission regulated by us; only such entities would be affected by the rule. Wages: None estimated.						

[1] Full Disclosure Preliminary Impact Analysis of the proposed rule "Good Laboratory Practice for Nonclinical Laboratory Studies," Docket No. FDA–2010–N–0548. (Available at: *http://www.fda.gov/AboutFDA/ReportsManualsForms/Reports/EconomicAnalyses/default.htm*.)

IX. Paperwork Reduction Act of 1995

This proposed rule contains information collection provisions that are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520). A description of these provisions is given in the Description section of this document with an estimate of the annual reporting and recordkeeping burden. Included in the estimate is the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing each collection of information.

FDA invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of FDA's functions, including whether the information will have practical utility; (2) the accuracy of FDA's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques, when appropriate, and other forms of information technology.

Title: Reporting and Recordkeeping Requirements for Good Laboratory Practice for Nonclinical Laboratory Studies—OMB Control Number 0910–0119—Revision

Description: This proposed rule would revise the existing information collection requirements in the GLP regulations to provide for the development and implementation of a GLP Quality System and to reflect current procedures for the conduct of nonclinical laboratory studies, particularly multisite studies.

Description of respondents: Respondents to the information collection are persons conducting a phase of a nonclinical laboratory study that is within the proposed expanded scope of part 58, including their personnel, independent contributing scientists, and study sponsors as the latter two terms are defined in this proposed rule; universities; or government agencies.

Reporting: Currently, the GLP regulations include requirements to: (1) Report the results of QAU inspections; (2) submit periodic QAU study reports; (3) provide a QAU statement as part of the final study report; (4) provide the results of test and control article characterization and the testing of mixtures of test and control articles with carriers; (5) report a change in archive location; and (6) prepare in writing a final study report containing an overall interpretation of nonclinical laboratory studies.

The proposed rule will revise these requirements to include: (1) A final study report incorporating additional information about all persons conducting one or more nonclinical laboratory study phases and a study director's compliance statement; (2) QAU reports on facility-based inspections and process-based inspections, where conducted; (3) written certification whenever a process-based QAU inspection reveals problems, with documentation that records the actions taken; (4) summaries of the closeout of discontinued studies; (5) notification of the change of archival site within a specified timeframe; (6) reports by the study sponsor to the study director of known risks of the test article and necessary measures to protect study personnel; and (7) reports by the study sponsor to the study director of the results of characterization of any reference articles that may be employed in a study as well of mixtures of such reference articles with carriers. Finally, for sponsors who submit the results of nonclinical laboratory studies in support of applications or submissions to FDA that are proposed additions to the scope of part 58 and that lack enacting regulations, (8) submission of the final study report and a GLP compliance statement.

QAU inspection reports provide the study director and management with executive responsibility information about the progress of a study and its compliance with GLP regulations so they can take any corrective actions required to ensure the quality and integrity of the data. Test, control, and reference article information helps ensure proper dosing of the test system(s) and allows interpretation of study results in the final study report. The study sponsor receives the final study report and commonly submits the report in support of an application or submission to FDA. The information in the final study report gives FDA's scientific review experts the information needed to help determine the safety or toxicity of the test article or both. FDA needs such safety and toxicity information to make regulatory decisions regarding the test article, including permitting the conduct of clinical studies on human subjects, determining safe levels of residual drug for drugs administered to animals whose products will be consumed by humans, and marketing new products for both human and non-human animal use. Since a number of the additional applications and submissions proposed for the scope expansion do not have enacting regulations, inclusion in part 58 is necessary.

We estimate the reporting burden of this collection of information as follows:

TABLE 2—ESTIMATED ONE-TIME REPORTING BURDEN [1]

Activity	Number of respondents	Number of responses per respondent	Total annual responses	Average burden per response	Total hours
Read and Understand the Proposed Rule: Sponsors of Nonclinical Laboratory Studies	2,193	1	2,193	7.2	15,790
Read and Understand the Proposed Rule: Testing Facilities of Nonclinical Laboratory Studies	300	1	300	18	5,400
Total			2,493		21,190

[1] There are no capital costs or operating and maintenance costs associated with this collection of information.

Table 2 shows the estimated one-time burden associated with the new reporting provisions of the proposed rule. We expect that persons conducting a phase of a nonclinical laboratory study that is within the proposed expanded scope of part 58 will need to read and understand the proposed rule. We expect that some entities would face lower complexity from reading the proposed rule and some entities would face higher complexity. In the Preliminary Regulatory Impact Analysis (PRIA), we calculated lower and upper estimates of time to read and understand the proposed rule under a low-complexity scenario for sponsors of nonclinical laboratory studies who would face fewer provisions. Our estimates under a high-complexity scenario apply to testing facilities of nonclinical laboratory studies that would have to read and understand more provisions in the rule. As stated in the PRIA, we estimate that there are 2193 sponsors of nonclinical laboratory studies and 300 testing facilities of nonclinical laboratory studies. We estimate that the 2193 sponsors of nonclinical laboratory studies will take from 4.8 to 9.6 hours, for an average of 7.2 hours, to read and understand the proposed rule. We expect that the 300 testing facilities of nonclinical laboratory studies will take from 12 to 24 hours, for an average of 18 hours, to read and understand the proposed rule.

TABLE 3—ESTIMATED RECURRING REPORTING BURDEN [1]

21 CFR Section	Number of respondents	Number of responses per respondent	Total annual responses	Average burden per response	Total hours
Sponsor provides test, control, and reference article characterization and risk information (§ 58.5(g) & (h))	1,316	5	6,580	1	6,580
Sponsor provides nonclinical laboratory study report in support of applications and submissions (§ 58.5(k))	10	1	10	15	150
Expanded content of QAU statement in final study report (§ 58.35(b)(11))	300	60.25	18,075	.25 (15 minutes)	4,518.75
Management report of actions taken when a process-based inspection reveals problems (§ 58.35(e))	10	2	20	5	100
Expanded contents of final study report (§ 58.185(a))	300	60.25	18,075	2	36,150
Compliance statement by study director appended to final study report (§ 58.185(a)(16))	300	60.25	18,075	.5 (30 minutes)	9,037.5
Summary report of close-out for discontinued studies (§ 58.185(d))	300	2	600	2	1,200
Reports by independent contributing scientists (§ 58.37(a)(2))	30	1	30	5	150
Principal Investigator (PI) reports of deviations (§ 58.39(c))	200	10	2,000	1	2,000
PI study report & compliance statement (§ 58.39 (d))	200	5	1,000	8	8,000
Management report of personnel deviations from protocol (§ 58.29(b))	300	10	3,000	.5 (30 minutes)	1,500
Total			67,465		69,386.25

[1] There are no capital costs or operating and maintenance costs associated with this collection of information.

Table 3 shows the estimated recurring reporting burden associated with the proposed rule. Together, this results in a total of 90,576.25 hours and 69,958 responses.

Recordkeeping: Currently, the GLP regulations include requirements that respondents must record: (1) Personnel job descriptions and summaries of training and experience; (2) master schedules, protocols, and protocol amendments; (3) equipment inspection, maintenance, calibration, and testing records; (4) SOPs; (5) documentation of feed and water analyses and animal treatments; (6) test article accountability records; and (7) study documentation, including raw data.

This proposed rule will add to the existing requirements with regard to initial changes and additions to SOPs for both testing facilities and test sites to develop, implement, and maintain a GLP Quality System and to expand many SOPs to specifically include multisite studies.

This proposed rule would also expand personnel record maintenance to require records of training and experience on GLP requirements and species-specific animal care. In addition, this proposed rule includes revisions to the required content of study protocols as part of a GLP Quality System and for multisite study specifics.

The additional documentation by management with executive responsibility and study directors is for the implementation of a GLP Quality System and the resulting additional burden is nominal. Documentation by independent contributing scientists, as defined in this proposed rule, includes records these individuals would usually retain, so a nominal added burden is predicted.

To implement the proposed checks and balances discussed previously in the preamble, proposed revisions will require that added documentation be made by the study director and the QAU to ensure the viability of the proposed GLP Quality System (see Table 5).

This proposed rule also adds requirements for the study sponsor to maintain records of: (1) Protocol and protocol amendment approval; (2) the accreditation status of a contracted person (as defined in this proposed rule) that conducts a phase of the study that involves the use of animals; (3) test, control, and reference article characterization; and (4) the qualifications of all contracted persons.

In addition, the proposed rule includes recordkeeping requirements for nonclinical laboratory studies that choose to utilize the option of having a principal investigator, particularly for multisite studies. These individuals will have recordkeeping responsibilities comparable to those of the study director for the nonclinical laboratory study phases for which they are responsible.

The persons potentially retaining nonclinical laboratory study documents are persons conducting a phase of a nonclinical laboratory study that is within the proposed expanded scope of part 58, including independent contributing scientists, and study sponsors as defined in this proposed rule. Results of nonclinical laboratory studies may be used by firms in support of applications and submissions to FDA, including applications and submissions for research and marketing of new products. The additional documentation of the conduct and data collection of nonclinical laboratory studies of FDA-regulated products will help ensure the quality and integrity of final study reports. FDA conducts on-site reviews of records and study reports during inspections of persons conducting one or more nonclinical laboratory study phases to verify the reliability of results submitted in support of applications and submissions to FDA.

We estimate the recordkeeping burden of this collection of information as follows:

TABLE 4—ESTIMATED ONE-TIME RECORDKEEPING BURDEN [1]

Activity	Number of recordkeepers	Number of records per recordkeeper	Total annual records	Average burden per recordkeeping	Total hours
Update Existing SOPs	300	12	3,600	7.5	27,000
Write New SOPs	300	10	3,000	24	72,000
Training	300	2	600	14	8,400
Total			7,200		107,400

[1] There are no capital costs or operating and maintenance costs associated with this collection of information.

Table 4 shows the estimated one-time burden associated with the revised recordkeeping provisions of the proposed rule. We expect that the 300 testing facilities of nonclinical laboratory studies will need to update existing SOPs and to write new SOPs. In the PRIA, we estimated that each facility would need to update 12 existing SOPs and write 10 new SOPs. We calculated lower and upper estimates of time to update existing SOPs and to write new SOPs. We estimate that it will take from 4 to 11 hours, for an average of 7.5 hours, to update 12 existing SOPs. We estimate that it will take from 15 to 33 hours, for an average of 24 hours, to write 10 new SOPs. We also expect that the 300 testing facilities of nonclinical laboratory studies will need to conduct training. In the PRIA, we estimated that for the low estimate one person would be doing the training and one person would be trained. By contrast, for the high estimate, we estimated that also one person would be doing the training and potentially three people would receive such training, for an average of two employees for each facility. We calculated lower and upper estimates of time to train, estimating that it will take from 5 to 23 hours, for an average of 14 hours, to train.

TABLE 5—ESTIMATED RECURRING RECORDKEEPING BURDEN [1]

	Number of recordkeepers	Number of records per recordkeeper	Total annual records	Average burden per recordkeeping	Total hours
Sponsor documentation (§ 58.5):					

TABLE 5—ESTIMATED RECURRING RECORDKEEPING BURDEN [1]—Continued

	Number of recordkeepers	Number of records per recordkeeper	Total annual records	Average burden per recordkeeping	Total hours
—(c) protocol approval and (i) all amendments	2,193	100	219,300	1	219,300
—(b) animal welfare	1,316	5	6,580	2	13,160
—(d) accreditation status of testing facility	1,316	5	6,580	.5 (30 minutes)	3,290
—(g) test, control, and reference article parameters	1,316	5	6,580	.5 (30 minutes)	3,290
—(j) archival locations	2,193	62.25	136,514	.25 (15 minutes)	34,128.5
—(e) qualifications of contracted persons	1,316	5	6,580	2	13,160
Documentation by management with executive responsibility:					
—GLP training and experience (§ 58.29(a) & (d))	300	500	150,000	.25 (15 minutes)	37,500
—Animal care training and experience (§ 58.29(a) & (d))	300	5	1,500	.25 (15 minutes)	375
—all persons are qualified for multisite studies (§ 58.31(i))	300	500	150,000	.25 (15 minutes)	37,500
—Periodic review of GLP Quality System (§ 58.31(b))	300	.25	75	.5 (30 minutes)	37.5
—Periodic review of QAU (§ 58.31(r))	300	1	300	.5 (30 minutes)	150
—Appointment of management representative (§ 58.31(e))	300	.1	30	.25 (15 minutes)	7.5
—all test sites have master schedule (§ 58.31(j))	300	15	4,500	.25 (15 minutes)	1,125
—appointment of person to manage master schedule (§ 58.31(k))	300	0.1	30	.25 (15 minutes)	7.5
—selection of lead QAU for multisite studies (§ 58.31(p))	300	5	1,500	.25 (15 minutes)	375
—QAU review of protocols, SOPs, & their amendments (§ 58.31(q))	300	5	1,500	.25 (15 minutes)	375
QAU:					
—review of study protocols + amendments (§ 58.35(b)3))	300	17	5,100	1.5	7,650
—SOPs review + amendments (§ 58.35(b)(4))	300	17	5,100	1.5	7,650
—facility and process-based inspections (§ 58.35(b)(5))	150	5	750	.25 (15 minutes)	187.5
—audits of final reports of contributing scientists (§ 58.35(b)(9))	300	600	180,000	.5 (30 minutes)	90,000
—audits of principal investigator (reports (§ 58.35(b)(9))	300	120	36,000	.5 (30 minutes)	18,000
—audits of final study reports for multisite studies (§ 58.35(b)(10))	300	60	18,000	.5 (30 minutes)	9,000
Study Director					
—Multisite study need for PIs (§ 58.33(b)(7)(ii))	300	180	54,000	1	54,000
—communications (§ 58.33(b)(12))	300	180	54,000	.25 (15 minutes)	13,500
—protocol followed (§ 58.33(b)(1))	300	60	18,000	1	18,000
—QAU review of protocol & SOPs (§ 58.33(b)(2))	300	17	5,100	.25 (15 minutes)	1,275

TABLE 5—ESTIMATED RECURRING RECORDKEEPING BURDEN [1]—Continued

	Number of recordkeepers	Number of records per recordkeeper	Total annual records	Average burden per recordkeeping	Total hours
—management provided adequate resources (§ 58.33(b)(3))	300	5	1,500	.5 (30 minutes)	750
—computerized systems validated (§ 58.33(b)(4))	300	5	1,500	.25 (15 minutes)	375
—Committee review 58.33(b)(5)	300	17	5,100	.25 (15 minutes)	1,275
—multisite study personnel qualified (§ 58.33(b)(7)(i))	300	15	4,500	1	4,500
—test system as required (§ 58.33(b)(10))	300	5	1,500	.25 (15 minutes)	375
—GLP compliance (§ 58.33(b)(11))	300	60	18,000	1	18,000
—test article accountability when containers disposed of (§ 58.105(d))	300	6	1,800	.25 (15 minutes)	450
Independent contributing scientists:					
—Education, training, and experience (§ 58.37(b)(2))	30	1	30	.25 (15 minutes)	7.5
—Archive location (§ 58.37(b)(4))	30	1	30	.25 (15 minutes)	7.5
—Appropriate animal care (§ 58.37(b)(3))	2	1	2	.5 (30 minutes)	1
PIs:					
—Protocol + amendment acceptance (§ 58.39(a))	200	5	1,000	.25 (15 minutes)	250
—Study deviations (§ 58.39(c))	200	10	2,000	.5 (30 minutes)	1,000
—Archive location (§ 58.39((e))	200	40	8,000	.25 (15 minutes)	2,000
Recordkeeping (§ 58.195)	300	251.5	75,450	3.9	294,255
Total			1,188,031		906,289.5

[1] There are no capital costs or operating and maintenance costs associated with this collection of information.

Table 5 shows the estimated recurring recordkeeping burden associated with the proposed rule. Together, this results in a total of 1,013,689.5 hours and 1,195,231 records.

To ensure that comments on information collection are received, OMB recommends that written comments be faxed to the Office of Information and Regulatory Affairs, OMB (see **ADDRESSES**). All comments should be identified with the title of the information collection.

In compliance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3407(d)), the Agency has submitted the information collection provisions of this proposed rule to OMB for review. These requirements will not be effective until FDA obtains OMB approval. FDA will publish a notice concerning OMB approval of these requirements in the **Federal Register**.

X. Federalism

FDA has analyzed this proposed rule according to the principles set forth in Executive Order 13132. FDA has determined that the proposed rule, if finalized, would not contain policies that would have substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. Accordingly, the Agency tentatively concludes that the proposed rule does not contain policies that have federalism implications as defined in the Executive order and, consequently, a federalism summary impact statement is not required.

XI. References

The following references are on display in the Division of Dockets Management (see **ADDRESSES** and are available for viewing by interested persons between 9 a.m. and 4 p.m., Monday through Friday; they are also available electronically at *http://www.regulations.gov.* FDA has verified the Web site addresses, as of the date this document publishes in the **Federal Register**, but Web sites are subject to change over time.

1. "OECD Series on Principles of Good Laboratory Practice (GLP) and Compliance Monitoring," (the link provided is to an index of all OECD documents related to GLPs, with links to each of the individual documents) (*http://www.oecd.org/chemicalsafety/testingofchemicals/oecdseriesonprinciplesofgoodlaboratorypracticeglpandcompliancemonitoring.htm*).

2. "Mutual Acceptance of Data (MAD)," (*http://www.oecd.org/env/ehs/mutualacceptanceofdatamad.htm*).

3. FDA, "FDA Announces New Initiative to Modernize the Regulation of Clinical Trials and Bioresearch Monitoring," FDA News Release, June 26, 2006 (*http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/2006/ucm108677.htm*).

4. FDA, "Nonclinical Laboratory Studies; Proposed Regulations for Good Laboratory Practice Regulations" 41 FR 51206 (November 19, 1976).

5. MOU 225–06–4000. "Memorandum of Understanding Among the Animal and Plant Health Inspection Service, U.S. Department of Agriculture, and the Food and Drug Administration, U.S. Department of Health and Human Services, and the National Institutes of Health, U.S. Department of

Health and Human Services, Concerning Laboratory Animal Welfare," (*http://www.fda.gov/AboutFDA/PartnershipsCollaborations/MemorandaofUnderstandingMOUs/DomesticMOUs/ucm247294.htm*).

6. "OECD Series on Principles of Good Laboratory Practice and Compliance Monitoring Number 13," *The Application of the OECD Principles of GLP to the Organisation and Management of Multi-Site Studies;* Consensus Document of the Working Group on Good Laboratory Practice (*http://search.oecd.org/officialdocuments/displaydocumentpdf/?doclanguage=en&cote=env/jm/mono(2002)9*).

7. "OECD Series on Principles of Good Laboratory Practice and Compliance Monitoring Number 4 (Revised)," Consensus Document; *Quality Assurance and GLP* (*http://search.oecd.org/officialdocuments/displaydocumentpdf/?doclanguage=en&cote=env/jm/mono(99)20*).

8. "OECD Series on Principles of Good Laboratory Practice and Compliance Monitoring Number 1," *The OECD Principles on Good Laboratory Practice* (*http://search.oecd.org/officialdocuments/displaydocumentpdf/?doclanguage=en&cote=env/mc/chem(98)17*).

9. "OECD Series on Principles of Good Laboratory Practice and Compliance Monitoring Number 11," Advisory Document of the Panel on Good Laboratory Practices, *The Role and Responsibilities of the Sponsor in the Application of the Principles of GLP* (*http://search.oecd.org/officialdocuments/displaydocumentpdf/?doclanguage=en&cote=env/mc/chem(98)16*).

10. Council for International Organization of Medical Sciences and The International Council for Laboratory Animal Science, *International Guiding Principles for Biomedical Research Involving Animals*, December 2012 (revised) (*http://www.cioms.ch/images/stories/CIOMS/IGP2012.pdf*).

11. Institute for Laboratory Animal Research, *Guide for the Care and Use of Laboratory Animals, Eighth Edition*, 2011 (*http://grants.nih.gov/grants/olaw/Guide-for-the-Care-and-Use-of-Laboratory-Animals.pdf*).

12. FDA, "Nonclinical Laboratory Studies, Good Laboratory Practice Regulations," Final Rule, 43 FR 59986 (December 22, 1978).

13. Compliance Policy Guide (CPG 7151.02), Sec. 130.300—FDA Access to Results of Quality Assurance Program Audits and Inspections (*http://www.fda.gov/ICECI/ComplianceManuals/CompliancePolicyGuidanceManual/ucm073841.htm*).

14. "OECD Series on Principles of Good Laboratory Practice and Compliance Monitoring Number 8 (Revised)," Consensus Document, *The Role and Responsibilities of the Study Director in GLP Studies* (*http://search.oecd.org/officialdocuments/displaydocumentpdf/?doclanguage=en&cote=env/jm/mono(99)24*).

15. "OECD Series on Principles of Good Laboratory Practice and Compliance Monitoring Number 7 (Revised)," Consensus Document, *The Application of the GLP Principles to Short Term Studies* (*http://search.oecd.org/officialdocuments/displaydocumentpdf/?doclanguage=en&cote=env/jm/mono(99)23*).

16. Bioanalytical Method Validation Draft Guidance for Industry (*http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM368107.pdf*).

17. Pesticide Registration Notice 2011–3 "Standard Format for Data Submitted Under the Federal Insecticide, Fungicide, and Rodenticide Act and Certain Provisions of the Federal Food, Drug, and Cosmetic Act" (*https://www.epa.gov/sites/production/files/2014-04/documents/pr2011-3.pdf*) (Study profile templates available at *https://www.epa.gov/pesticide-registration/study-profile-templates*).

18. Full Analysis of Economic Impacts (Docket Number FDA–2010–N–0548). Preliminary Regulatory Impact Analysis, Initial Regulatory Flexibility Analysis, and Unfunded Mandates Reform Act Analysis for Good Laboratory Practice for Nonclinical Laboratory Studies; Proposed Rule, available at *http://www.fda.gov/AboutFDA/ReportsManualsForms/Reports/EconomicAnalyses/default.htm*.

List of Subjects

21 CFR Part 16

Administrative practice and procedure.

21 CFR Part 58

Laboratories, Reporting and recordkeeping requirements.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs, it is proposed that 21 CFR parts 16 and 58 be amended as follows:

PART 16—REGULATORY HEARING BEFORE THE FOOD AND DRUG ADMINISTRATION

■ 1. The authority citation for part 16 continues to read as follows:

Authority: 15 U.S.C. 1451–1461; 21 U.S.C. 141–149, 321–394, 467f, 679, 821, 1034; 28 U.S.C. 2112; 42 U.S.C. 201–262, 263b, 364.

■ 2. In § 16.1, amend paragraph (b)(2) by removing the entry for § 58.204(b) and adding an entry for §§ 58.200 through 58.219 to read as follows:

§ 16.1 Scope.

* * * * *

(b) * * *

(2) * * *

§§ 58.200 through 58.219 (see part 58, subpart K of this chapter), relating to disqualifying any person conducting a phase of a nonclinical laboratory study of FDA-regulated products.

* * * * *

PART 58—GOOD LABORATORY PRACTICE FOR NONCLINICAL LABORATORY STUDIES

■ 3. The authority citation for part 58 is revised to read as follows:

Authority: 21 U.S.C. 342, 346, 346a, 348, 351, 352, 353, 355, 360, 360b–360f, 360h–360j, 360ccc, 371, 379e, 381, 387e, 387j, 387k; 42 U.S.C. 216, 262, 263b–263n.

■ 4. In § 58.1, revise paragraph (a) and add paragraph (c) to read as follows:

§ 58.1 Scope.

(a) This part prescribes good laboratory practices (GLPs) for conducting nonclinical laboratory studies of safety or toxicity or both that support or are intended to support an application or submission for products regulated by the Food and Drug Administration (FDA), including food and color additives, animal food additives, human and animal drugs, devices, biological products, electronic products, and tobacco products. Applications and submissions to FDA affected by these regulations include those listed in § 58.3. Compliance with this part is intended to assure the quality and integrity of data from nonclinical laboratory studies filed or submitted pursuant to sections 402, 406, 408, 409, 501, 502, 503, 505, 510, 512–516, 518–520, 571, 701, 721, 801, 905, 910, and 911 of the Federal Food, Drug, and Cosmetic Act and sections 351 and 354–360F of the Public Health Service Act.

* * * * *

(c) In this part the term "where appropriate" is used several times. When a requirement is qualified by "where appropriate," it is deemed to be "appropriate" unless justification can be otherwise documented. A requirement is "appropriate" if non-implementation could reasonably be expected to result in a nonclinical laboratory study whose results lack the required reliability.

■ 5. Revise § 58.3 to read as follows:

§ 58.3 Definitions.

As used in this part, the following terms have the meanings specified:

Applications and Submissions to FDA include:

(1) A color additive petition, described in section 721 of the Federal Food, Drug, and Cosmetic Act, and as described in part 71 of this chapter.

(2) A food additive petition, described in section 409 of the Federal Food, Drug and Cosmetic Act, and as described in parts 171 and 571 of this chapter.

(3) Data and information regarding a substance submitted as part of the procedures for establishing that a substance is generally recognized as safe for use, which use results or may reasonably be expected to result, directly or indirectly, in its becoming a component or otherwise affecting the characteristics of any food, described in §§ 170.35 and 570.25 of this chapter.

(4) Data and information regarding a food additive submitted as part of the procedures regarding food additives permitted to be used on an interim basis pending additional study, described in § 180.1 of this chapter.

(5) A petition for a nutrient content claim, described in section 403 of the Federal Food, Drug, and Cosmetic Act, and as described in subpart D of part 101 of this chapter.

(6) A petition for a health claim, described in section 403 of the Federal Food, Drug, and Cosmetic Act, and as described in subpart E of part 101 of this chapter.

(7) An *investigational new drug application,* described in section 505(i) of the Federal Food, Drug, and Cosmetic Act, and as described in part 312 of this chapter.

(8) *Applications for FDA approval to market a new drug,* described in section 505 of the Federal Food, Drug, and Cosmetic Act, and as described in part 314 of this chapter.

(9) Data and information regarding an over-the-counter drug for human use, submitted as part of the procedures for classifying such drugs as generally recognized as safe and effective and not misbranded, described in part 330 of this chapter.

(10) Data and information about a substance submitted as part of the procedures for establishing a tolerance for unavoidable contaminants in food and food-packaging materials, described in sections 406, 408, and 409 of the Federal Food, Drug, and Cosmetic Act, and as described in parts 109 and 509 of this chapter.

(11) A *notice of claimed investigational exemption for a new animal drug,* section 512(j) of the Federal Food, Drug, and Cosmetic Act, and as described in described in part 511 of this chapter.

(12) *New animal drug applications,* described in section 512 of the Federal Food, Drug, and Cosmetic Act, and as described in part 514 of this chapter.

(13) An *abbreviated application for a new animal drug,* described in section 512(b) of the Federal Food, Drug, and Cosmetic Act.

(14) An *application for conditional approval of new animal drugs for minor use and minor species,* described in section 571(a)(2) of the Federal Food, Drug, and Cosmetic Act, and as described in part 516 of this chapter.

(15) *Authorization to market edible products from experimental animals* as described in parts 170 and 570 of this chapter.

(16) A request to establish or amend an import tolerance described in section 512 of the Federal Food, Drug, and Cosmetic Act.

(17) [Reserved]

(18) An *application for a biologics license,* described in section 351 of the Public Health Service Act, and as described in part 601 of this chapter.

(19) An *application for an investigational device exemption,* described in section 520(g) of the Federal Food, Drug, and Cosmetic Act, and as described in part 812 of this chapter.

(20) An *application for premarket approval of a medical device,* described in section 515 of the Federal Food, Drug, and Cosmetic Act, and as described in part 814 of this chapter.

(21) An *application for humanitarian device exemption,* authorized under section 520(m) of the Federal Food, Drug, and Cosmetic Act, and as described in part 814, subpart H of this chapter.

(22) A *product development protocol for a medical device,* described in section 515 of the Federal Food, Drug, and Cosmetic Act, and as described in part 814 of this chapter.

(23) A *premarket notification submission* for a medical device as authorized under section 510(k) of the Federal Food, Drug, and Cosmetic Act, and as described in part 807, subpart E of this chapter.

(24) Data and information regarding a medical device submitted as part of the procedures for classifying such devices described in part 860, subpart B of this chapter, reclassification petitions described in part 860, subpart C of this chapter, and requests associated with the evaluation of automatic class III designations, authorized under section 513(f)(2) of the Federal Food, Drug, and Cosmetic Act.

(25) Data and information regarding a medical device submitted as part of the procedures for establishing, amending, or revoking a performance standard for such devices, described in section 514 of the Federal Food, Drug, and Cosmetic Act, and as described in part 861 of this chapter.

(26) Data and information regarding an electronic product submitted as part of the procedures for obtaining an exemption from notification of a radiation safety defect or failure of compliance with a radiation safety performance standard, described in subpart D of part 1003 of this chapter.

(27) Data and information regarding an electronic product submitted as part of the procedures for establishing, amending, or repealing a standard for such product, described in section 358 of the Public Health Service Act.

(28) Data and information regarding an electronic product submitted as part of the procedures for obtaining a variance from any electronic product performance standard as described in § 1010.4 of this chapter.

(29) Data and information regarding an electronic product submitted as part of the procedures for granting, amending, or extending an exemption from any electronic product performance standard, as described in § 1010.5 of this chapter.

(30) A *premarket notification for a food contact substance,* described in section 409 of the Federal Food, Drug, and Cosmetic Act, and as described in part 170, subpart D of this chapter.

(31) [Reserved]

(32) A *premarket application for a new tobacco product,* as described in section 910(b)(1) of the Federal Food, Drug, and Cosmetic Act.

(33) A *substantial equivalence report* as described in section 905(j) of the Federal Food, Drug, and Cosmetic Act.

(34) A *request for exemption* under section 905(j)(3) of the Federal Food, Drug, and Cosmetic Act, and as described in part 1107 of this chapter.

(35) An *application or submission related to a modified risk tobacco product,* as described in section 911of the Federal Food, Drug, and Cosmetic Act.

Attending veterinarian means a veterinarian who has training or experience or both in the care and management of the species being attended and who has direct or delegated authority for activities involving animals.

Batch means a specific quantity or lot of a test, control, or reference article that has been characterized according to § 58.105 and handled according to § 58.107.

Contracted person means a person who assumes, either directly or indirectly as an independent contractor, one or more responsibilities for the conduct of a nonclinical laboratory study.

Contributing scientist means an individual responsible for the conduct, interpretation, analysis, or any other service for a phase of a nonclinical laboratory study. An individual expert or specialist who is an independently employed contracted person, as defined in this section, is an independent contributing scientist.

Control article means any food additive, color additive, drug, biological product, electronic product, device, tobacco product, or any article other than a test article, reference article, feed, or water that is administered to the test system in the course of a nonclinical laboratory study for the purpose of establishing a basis for comparison with the test article.

Establish means define, document (in writing or electronically), and implement.

Facility-based inspection means an inspection which is not based on specific studies but covers general facilities and activities, for example, installations, support systems, computer systems, training, environmental monitoring, and equipment maintenance and calibration.

GLP Quality System means the organizational structure, responsibilities, procedures, processes, and resources for implementing quality management in the conduct of a nonclinical laboratory study.

Lead quality assurance unit (lead QAU) means the QAU responsible for quality assurance (QA) in a multisite nonclinical laboratory study. Testing facility management with executive responsibility selects the lead QAU.

Management with executive responsibility means those senior employees of a testing facility or test site who have the authority to establish or make changes to the quality policy and GLP Quality System at the testing facility and test site, respectively.

Master schedule means a compilation of information used for assessment of workload and the tracking of nonclinical laboratory studies.

Multisite study means any study that has phases conducted at more than one site.

Nonclinical laboratory study means in vivo or in vitro experiments in which test articles are studied prospectively in test systems under laboratory conditions or in the applicable environment to determine their safety or toxicity or both. The term does not include studies involving human subjects, clinical studies, or clinical investigational use in animals. The term does not include basic exploratory studies carried out to determine whether a test article has any potential utility or basic exploratory studies to determine the physical or chemical characteristics of a test article.

Person includes an individual, partnership, corporation, association, scientific or academic establishment, government agency, or organizational unit thereof, and any other legal entity.

Phase means a defined activity or set of activities in the conduct of a nonclinical laboratory study.

Principal investigator means an individual who has specific responsibilities for one or more phases of a nonclinical laboratory study as delegated by the study director.

Process-based inspection means an inspection conducted to monitor procedures or processes of a repetitive nature that are very frequently performed. Process-based inspections are conducted on a prearranged schedule, which is not connected to the timing of any particular nonclinical laboratory study. Performance of process-based inspections covering processes or procedures that occur with a very high frequency (for example, certain mutagenicity studies) may cause some studies to be uninspected during the in-life period of the study, as defined in this section within the definition of *Short-term study.*

Quality means the totality of features and characteristics that bear on the ability of a nonclinical laboratory study to provide data that can be relied upon.

Quality assurance unit (QAU) means any person or organizational element designated to perform the duties relating to quality assurance (QA) of nonclinical laboratory studies. For any given study, the QAU must be entirely separate from and independent of the personnel engaged in the direction and conduct of the study.

Quality policy means the overall intentions and direction of an organization with respect to quality, as established by management with executive responsibility.

Raw data means all original nonclinical laboratory study records and documentation or exact copies that maintain the original intent and meaning and are made according to the person's certified copy procedures. *Raw data* includes any laboratory worksheets, correspondence, notes, and other documentation (regardless of capture medium) that are the result of original observations and activities of a nonclinical laboratory study and are necessary for the reconstruction and evaluation of the report of that study. *Raw data* also includes the signed and dated pathology report.

Reference article means any chemical substance or mixture, or analytical standard, or material other than a test article, control article, feed, or water that is administered to or used in analyzing the test system in the course of a study for the purposes of establishing the basis for comparison with the test article for known chemical or biological measurements.

Short-term study means a study for which the in-life period is completed within several days or a week at most. The in-life period of a study is that period during which data are collected.

Specimen means any material derived from a test system for examination, analysis, or retention.

Sponsor means: (1) A person that initiates and supports, by provision of financial or other resources, a nonclinical laboratory study; or

(2) A person that submits a nonclinical laboratory study in support of an application or submission to FDA; or

(3) A person that initiates a nonclinical laboratory study and functions as, and has the same responsibilities as, a testing facility, test site, or contributing scientist, as those terms are defined in this section.

Standard operating procedures (SOPs) means documented procedures which describe how to perform tests or activities normally not specified in detail in study protocols.

Study-based inspection means an inspection of a critical operation of the study which is scheduled according to the chronology of the given study. Management with executive responsibility at the testing facility and/or test site identifies which operations are critical before initiation of the study.

Study completion date means the date the final report is signed by the study director.

Study director means the individual responsible for the overall conduct of a nonclinical laboratory study.

Study initiation date means the date the protocol is signed by the study director.

Test article means any food additive, color additive, drug, biological product, electronic product, device, tobacco product, or any other article subject to regulation under the Federal Food, Drug, and Cosmetic Act or under sections 351 and 354–360F of the Public Health Service Act.

Test site means a person who is responsible for one or more phases of a multisite nonclinical laboratory study. A test site includes management with executive responsibility and supporting SOPs relevant to the conduct of nonclinical laboratory studies.

Test system means any animal, plant, microorganism, or subparts thereof to which the test, control, or reference article is administered or added for study. *Test system* also includes appropriate groups or components of the system not treated with the test, control, or reference articles.

Testing facility means the person responsible for coordinating, conducting, or completing a nonclinical laboratory study, or any combination thereof. The testing facility designates the study director.

Validation means confirmation by examination and provision of objective evidence that the particular requirements for a specific intended use can be consistently fulfilled.

Vehicle means any agent which serves as a carrier and is used to mix, disperse, or solubilize the test, control, or reference article for administration or application to the test system.

■ 6. Add § 58.5 to subpart A to read as follows:

§ 58.5 Sponsor responsibilities.

For each nonclinical laboratory study, the sponsor must:

(a) Ensure the nonclinical laboratory study protocol (the study protocol) meets the requirements in § 58.120.

(b) Ensure that the study protocol provides for humane care and ethical treatment of animals.

(c) Sign and date the study protocol to indicate approval.

(d) Contract with persons accredited as following appropriate animal welfare procedures for phases of a nonclinical laboratory study that include the use of animals. If these contracted persons are not accredited, document this fact, the reason for using a non-accredited person, and the qualifications of the non-accredited person. This information must be included in the compliance statement required in paragraph (k) in this section.

(e) Document that any contracted person conducting a phase of a nonclinical laboratory study is qualified according to the provisions in this part.

(f) Ensure that appropriate lines of communication are established among all persons conducting a phase of the nonclinical laboratory study and document all study-related communications that involve the sponsor.

(g) Document that test, control, and reference articles are prepared, characterized, and labeled according to subpart F of this part, and are appropriately shipped. Obtain, and provide to the study director as soon as available, information regarding test, control, and reference article characterization as specified in § 58.105.

(h) Inform the study director of any known potential risks of the test article to human health or the environment and any measures necessary to protect study personnel and the environment.

(i) Review, approve, sign, and date each protocol amendment before implementation.

(j) Document and update as necessary the archive location of all raw data and records as described in §§ 58.190 and 58.195.

(k) Include, in any application or submission to FDA that includes the results of a nonclinical laboratory study, the final study report and all amendments. If a summary report of the nonclinical laboratory study is included in such applications or submissions, a copy of the final study report, as described in § 58.185, must be appended or provided elsewhere within the application or submission. Also, include either a statement that the study was conducted in compliance with the requirements set forth in this part, or, if the study was not conducted in compliance with these regulations, a brief statement of the reason for the noncompliance.

■ 7. Revise § 58.10 to read as follows:

§ 58.10 Transfer of responsibilities.

(a) Any person utilizing the services of a contracted person (as defined in § 58.3) to perform a phase (as defined in § 58.3) of a nonclinical laboratory study may transfer to the contracted person any regulatory responsibility in this chapter, unless delegation of such responsibility is expressly prohibited. Any such transfer must be described in writing. Any responsibility not covered by the written description is deemed not transferred.

(b) Any person transferring to a contracted person any responsibility for a phase of a nonclinical laboratory study must inform that contracted person that the transferred responsibility must be performed in compliance with the provisions in this part.

(c) A contracted person assuming any responsibility for a phase of a nonclinical laboratory study must comply with the regulations in this chapter applicable to the transferred responsibility and is subject to the same regulatory actions as those transferring the responsibility.

■ 8. Revise § 58.15 to read as follows:

§ 58.15 Inspection of any person conducting a phase of a nonclinical laboratory study.

(a) Any person conducting a phase of a nonclinical laboratory study must permit, at reasonable times and in a reasonable manner, an authorized employee of FDA to inspect and copy all records and inspect all specimens required to be maintained for nonclinical laboratory studies within the scope of this part and, where applicable, to collect reserve samples for such studies. The records inspection and copying requirements do not routinely apply to QAU records of findings and problems or to actions recommended and taken. However, FDA retains the authority to inspect all QAU records when necessary to ensure compliance with this part.

(b) FDA will not consider a nonclinical laboratory study submitted in support of an application or submission to FDA if any person conducting a phase of the nonclinical laboratory study refuses to permit inspection. The determination that a nonclinical laboratory study will not be considered in support of an application or submission to FDA does not, however, relieve the applicant of any obligation under any other applicable statute or regulation to submit the results of the study to FDA.

■ 9. Revise § 58.29 to read as follows:

§ 58.29 Personnel.

(a) Each individual engaged in the conduct of, or responsible for the supervision of, a nonclinical laboratory study must have education, training, and experience, or a combination thereof, to enable that individual to perform the assigned functions. This must include training and experience with GLP requirements. Personnel who work with animals must have both general and species-specific training and experience.

(b) All study personnel must have access to and comply with the protocol and all applicable protocol amendments and SOPs. Any deviation must be reported to the study director.

(c) All study personnel must record raw data, as defined in § 58.3, promptly and accurately as required by § 58.180.

(d) Any person conducting a phase of a nonclinical laboratory study must maintain a current summary of training and experience and a job description for each individual in the person's employment engaged in or supervising the phase of the study for which the person is responsible.

(e) There must be a sufficient number of personnel for the timely and proper conduct of the study according to the protocol.

(f) Personnel must take necessary personal sanitation and health precautions designed to avoid contamination of test, control, and reference articles and test systems.

(g) Personnel engaged in a nonclinical laboratory study must wear clothing appropriate for the duties they perform. Such clothing must be changed as often as necessary to prevent microbiological, radiological, or chemical contamination of test systems and test, control, and reference articles.

(h) Any individual found at any time to have an illness that may adversely affect the quality and integrity of the nonclinical laboratory study must be excluded from direct contact with test systems; test, control, and reference articles; and any other operation or function that may adversely affect the study until the condition is corrected.

All personnel must be instructed to report to their immediate supervisors any health or medical conditions that may reasonably be considered to have an adverse effect on a nonclinical laboratory study.

■ 10. Revise § 58.31 to read as follows:

§ 58.31 Testing facility management with executive responsibility.

Management with executive responsibility is ultimately responsible for the GLP Quality System and must establish policy and objectives for a GLP Quality System and a commitment to quality, as defined in § 58.3. Management with executive responsibility must ensure that the quality policy, as defined in § 58.3, is implemented and maintained at all levels of the organization. Management with executive responsibility must:

(a) Establish and update written SOPs, as required in § 58.81(b)(2) for a GLP Quality System.

(b) Review the suitability and effectiveness of the GLP Quality System at defined intervals and with sufficient frequency according to established procedures, to be included in SOPs for the GLP Quality System (§ 58.81(b)(2)), to ensure that the GLP Quality System satisfies the established quality policy and objectives and the requirements of this part. The dates and results of these reviews must be documented.

(c) Establish and maintain an adequate organizational structure (personnel, resources, facilities, equipment, materials, and methodologies) to ensure that all testing complies with the established GLP Quality System, according to the requirements of this part.

(d) Establish procedures, to be included in SOPs for the GLP Quality System (§ 58.81(b)(2)), for the appropriate responsibility, authority, and interrelationship among all personnel who manage, perform, and assess work affecting quality, and provide the independence and authority necessary to perform these tasks.

(e) Appoint and document the appointment of, according to procedures to be included in SOPs for the GLP Quality System (§ 58.81(b)(2)), a management representative who is a member of the testing facility management with authority over and responsibility for:

(1) Documenting that GLP Quality System requirements are effectively established and effectively maintained; and

(2) Reporting on the performance of the GLP Quality System to management with executive responsibility for review, including all reports from the QAU.

(f) Establish SOPs for equipment, as required in § 58.81(b)(14), including standards for appropriate documentation of equipment validation, as defined in § 58.3. For multisite studies, document that any person conducting a phase of the nonclinical laboratory study follows adequate equipment-related SOPs.

(g) Establish SOPs to ensure that computerized systems are suitable for their intended purposes and are appropriately validated, operated, and maintained as required in § 58.81(b)(15).

(h) Document that all study personnel are trained to perform their assigned functions.

(i) Establish SOPs, as required in § 58.81(b)(18), for ensuring and documenting the qualifications of any person conducting a phase of a nonclinical laboratory study.

(j) Establish SOPs for the development and maintenance of the master schedule as required in § 58.81(b)(13).

(k) Appoint and document the appointment of a person to maintain the master schedule. The master schedule must be indexed by test article and contain the identification of the test system, the nature of the study, the date the study was initiated, the current status of each study, the identity of the sponsor, and the name of the study director. For multisite studies, the master schedule of each person conducting a phase of a nonclinical laboratory study must also include the specific phases that person conducts.

(*l*) Establish procedures, to be included in SOPs for multisite studies required in § 58.81(b)(18), for the transfer of data, specimens, and samples among all persons conducting phases of the nonclinical laboratory study; verification of the accuracy and completeness of any translations of SOPs and protocols, when applicable; and storage, return, or disposal of test, control, and reference articles, as applicable.

(m) Review all protocols to determine that there are no environmental, animal welfare, or work resource issues or issues with scientific methodology that might affect or bias any phase of the conduct of the proposed study. Document the review and acceptance of each protocol.

(n) Establish SOPs, as required in § 58.81(b)(3), for designation of a study director, as described in § 58.33, before the study is initiated and prompt replacement of the study director if it becomes necessary to do so during the conduct of a study.

(o) Establish procedures, to be included in SOPs for the GLP Quality System (§ 58.81(b)(2)), to ensure a clear line of communication among the study director, principal investigator(s), QAU(s), the sponsor, and all study personnel, as applicable.

(p) Provide for a QAU as described in § 58.35. Before initiating a multisite study, as defined in § 58.3, designate and document the designation of the lead QAU with overall responsibility for the entire study. Provide the information described in § 58.35(a) of the lead QAU to all persons involved in the conduct of the study and all QAUs serving those persons.

(q) Establish procedures, to be included in SOPs for the GLP Quality System (§ 58.81(b)(2)), to ensure QAU review of SOPs and study protocols to verify that they meet GLP requirements. This review must be documented.

(r) Review the suitability and effectiveness of the QAU or lead QAU, as applicable, at defined intervals and with sufficient frequency, according to established SOPs as required in § 58.81(b)(17), to ensure that the QAU satisfies established quality policy and objectives and the requirements of this part. For multisite studies, testing facility management with executive responsibility must periodically review the suitability and effectiveness of the lead QAU. The dates and results of reviews of the QAU must be documented.

(s) Establish SOPs, as required in § 58.81(b)(6), for the receipt of information regarding the characterization of all test, control, and reference articles or mixtures, including data on their identity, strength, purity, stability, and uniformity, as applicable.

(t) Establish SOPs, with appropriate timeframes, for the conduct of QAU inspections and for the receipt, review, and followup of all concerns, problems, and regulatory deviations reported by the QAU. These SOPs must include procedures for correcting reported problems and, as necessary, for modification of relevant SOPs to prevent a recurrence of any problems, as required in § 58.81(b)(20) and (21).

(u) Establish SOPs, as required in § 58.81(b)(13), for the development and maintenance of an archive system, including the designation and replacement of the archivist and any supporting staff.

(v) Establish procedures to ensure maintenance of a historical file of all SOPs as required in § 58.81(b)(1).

■ 11. Add § 58.32 to subpart B to read as follows:

§ 58.32 Test site management with executive responsibility.

For multisite studies, each test site participating in the study must have management with executive responsibility for the test site who must:

(a) Comply with responsibilities delineated for testing facility management with executive responsibility, as described in section § 58.31, where appropriate.

(b) Develop and maintain SOPs as specified in § 58.81, where appropriate.

■ 12. Revise § 58.33 to read as follows:

§ 58.33 Study director.

(a) For each nonclinical laboratory study, a scientist or other professional of appropriate education, training, and experience, or combination thereof, must be identified as the study director. The study director represents the single point of study control and has overall responsibility, which cannot be delegated, for:

(1) The technical conduct of the entire study;

(2) The implementation of procedures to ensure adequate communication among all study personnel and with the study sponsor, as applicable; and

(3) The interpretation, analysis, documentation, and reporting of results and study compliance.

(b) The study director must:

(1) Approve the protocol, including any changes, as provided by § 58.120, and document that it is followed.

(2) Document that the QAU has reviewed the protocol and all applicable SOPs, and any amendments, before study initiation and implementation of applicable amendments to ensure that they are compliant with GLP requirements.

(3) Document that testing facility management with executive responsibility has committed adequate resources for the conduct of the specific study.

(4) Document that computerized systems are validated and fit for use in the specific study.

(5) For studies requiring the use of animals, document that the initial protocol and any amendments that impact the use of animals are reviewed and approved, as required in § 58.120(b) and (e), by a committee whose function is to ensure that the care and use of animals in studies is appropriate and humane, before study initiation and the implementation of applicable amendments.

(6) Consult with the attending veterinarian, as defined in § 58.3, during review of proposed study protocols to determine potential animal welfare concerns and appropriate responses to likely contingencies. Defer to the attending veterinarian when decisions regarding animal welfare arise, particularly when animals are in pain or distress.

(7) For multisite studies:

(i) Document the qualifications of any person conducting a phase of the nonclinical laboratory study.

(ii) Determine and document the need for principal investigators.

(8) Document that all experimental data, including observations of unanticipated responses of the test system, are accurately recorded and verified.

(9) Document unforeseen circumstances that may affect the quality and integrity of the nonclinical laboratory study when they occur and the corrective action taken.

(10) Document that test systems are as specified in the approved study protocol.

(11) Document that all applicable GLP regulations are followed and include a study compliance statement in the final study report.

(12) Document all communications with all persons conducting a phase of the nonclinical laboratory study and with the sponsor, as applicable.

(13) Sign and date the final study report.

(14) Archive all raw data, documentation, protocols, specimens, reserve samples, and final reports no later than 2 weeks after the study completion date.

■ 13. Revise § 58.35 to read as follows:

§ 58.35 Quality assurance unit (QAU).

(a)(1) *Function.* A QAU must monitor each study to assure management that the facilities, equipment, personnel, methods, practices, records, and controls are in conformance with the regulations in this part. For any given study, the QAU must be entirely separate from and independent of the personnel engaged in the direction and conduct of the study.

(2) *Location and identity.* (i) For studies conducted entirely at the testing facility, the QAU can consist of personnel at the facility itself or be a separately contracted unit.

(ii) For multisite studies, a lead QAU must be designated by testing facility management with executive responsibility and must have responsibility for the QA of the entire study. The lead QAU can consist of personnel at the testing facility, be a QAU for another person conducting a phase of the study, or be a separately contracted unit. QAUs for persons conducting a phase of the study must coordinate with the lead QAU as specified in SOPs as described in § 58.81(b)(17) and (20). The lead QAU has direct QA responsibility for any person lacking a QAU.

(b) QAUs must: (1) Maintain access to the master schedule (defined in § 58.3) of all nonclinical laboratory studies conducted by the person employing the QAU or contracting for QA services. For multisite studies, the lead QAU must maintain access to the master schedule of any person lacking a QAU.

(2) Maintain access to copies of all protocols pertaining to all nonclinical laboratory studies for which the QAU is responsible.

(3) Review all protocols before study initiation, and all protocol amendments before implementation, to ensure that they can be conducted in compliance with this part. This review must be documented.

(4) Review all SOPs to be used for the conduct of all phases of a nonclinical laboratory study to assess their clarity and compliance with this part. This review must be documented.

(5) Inspect each nonclinical laboratory study for which the QAU is responsible at intervals adequate to ensure the integrity of the specific study. Inspections must determine compliance with the protocol, applicable SOPs, and the requirements of this part. These can include study-based, process-based, and facility-based inspections as defined in § 58.3 and as specified in SOPs as required in § 58.81(b)(20). For multisite studies, the lead QAU must coordinate the conduct of study inspections with any other existing QAUs, as specified in SOPs as required in § 58.81(b)(20). Upon discovery, any problems found during an inspection which are likely to affect study integrity must be reported to the study director and management with executive responsibility for the study or studies affected.

(6) Maintain written and properly signed records of all inspections that include the date of the inspection, the individual performing the inspection, findings and problems, action recommended and taken to resolve existing problems, and any scheduled date for reinspection. For study-specific inspections, reports must also include the identity of the study and the phase of the study inspected.

(7) Periodically submit to management with executive responsibility and the study director written status reports on each study that discuss the overall progress and compliance status of the study and that include any problems observed and the corrective actions taken. The content and frequency of these reports must be specified in SOPs, as described in § 58.81(b)(21).

(8) Determine that no deviations from approved protocols or SOPs were made without proper authorization and

documentation. For multisite studies, the lead QAU is responsible for identifying all deviations that occur across the entire study, including deviations identified by all other QAUs participating in the study, as described in SOPs in § 58.81(b)(17).

(9) Audit the reports of all contributing scientists, and any amendments to such reports, to ensure such reports reflect the protocol and all amendments, accurately describe the methods and SOPs, and report all of the raw data of the specific phases covered by each report. For multisite studies, QAUs for persons conducting a phase of the study must audit the reports of any principal investigators and all contributing scientists for whom they are responsible, and any amendments to such reports, as specified in SOPs as described in § 58.81(b)(17). The lead QAU must audit the reports, and any amendments to such reports, of any principal investigators and all contributing scientists for any person lacking a QAU and of any independent contributing scientists.

(10) Audit the final study report, and any amendments to this report, to ensure that such report accurately describes the methods and SOPs, all raw data of the nonclinical laboratory study are reported, and that all original and amended signed and dated reports from all contributing scientists are appended. For multisite studies, this is the responsibility of the lead QAU.

(11) Prepare, sign, and date a statement to be included with the final study report that specifies:

(i) The dates of study-specific inspections, process-based inspections if applicable, and facility-based inspections;

(ii) Findings reported to management with executive responsibility and to the study director; and

(iii) The dates of QAU audits of the reports of all contributing scientists (including any independent contributing scientists), any principal investigators, and of the final study report and all amendments to such. For multisite studies, this is the responsibility of the lead QAU. When other persons conducting a phase of the study have QAUs, those QAUs must provide to the lead QAU such statements regarding the audits they conducted, for appending to the final study report.

(c) The responsibilities and procedures applicable to the QAU, the records maintained by the QAU, and the method of indexing such records must be in writing and must be maintained as specified in SOPs as required in § 58.81(b)(17). For multisite studies, the lead QAU and all other QAUs participating in the study must maintain those documents relevant to their oversight. These SOPs as well as documentation of the dates of all QAU inspections, the study or process or procedure, or facility inspected as applicable, the phase or segment of the study inspected for study-specific inspections, and the name of the individual performing the inspection must be made available for inspection to authorized employees of FDA.

(d) A designated representative of FDA must, upon request, be given access to the written SOPs established for QAU inspections. If requested by FDA, the person inspected must certify that inspections are being implemented, performed, documented, and followed up according to this part.

(e) If a person conducting a phase of a nonclinical laboratory study chooses to conduct process-based inspections, that person must prepare a written certification, as specified in SOPs as required in § 58.81(b)(21), whenever a process-based inspection reveals problems. This certification must document actions taken to properly inform and, when applicable, modify reports for all studies impacted by the results of the process or procedure in question.

■ 14. Add § 58.37 to subpart B to read as follows:

§ 58.37 Contributing scientist.

(a) Each contributing scientist must:

(1) Conduct, oversee, analyze, and provide any other service for the conduct of all phases of the nonclinical laboratory study for which the contributing scientist is responsible according to the requirements of this part.

(2) Provide a signed and dated report of all phases for which the contributing scientist is responsible, to be included in the final study report. When there are amendments to the original report, provide a signed and dated copy of the amended report, to be included in the final study report along with the original report. Provide the report, and all amendments, to the study director or, when a multisite study employs principal investigators, through the principal investigator.

(3) Permit oversight by the designated QAU.

(b) In addition to the requirements in paragraphs (a)(1) through (3) of this section, an independent contributing scientist must:

(1) Date and sign the study protocol to indicate agreement to comply with protocol requirements for all phases of the nonclinical laboratory study the independent contributing scientist will conduct and the applicable requirements of this part. Date and sign any protocol amendments applicable to the phases of the nonclinical laboratory study conducted by the independent contributing scientist to indicate agreement.

(2) Maintain and update documentation of education, training, and experience pertinent to those phases of the nonclinical laboratory studies for which the independent contributing scientist is responsible.

(3) If conducting phases of a nonclinical laboratory study that include the use of animals:

(i) Document that housing, feeding, handling, and care of the animals as specified in § 58.90 are available.

(ii) Document that an attending veterinarian is available for consult and deferred to as necessary, particularly when animals are in pain or distress.

(iii) Document corrective actions required to assure the humane care and ethical treatment of animals.

(4) Archive all materials pertinent to all phases of the nonclinical laboratory the independent contributing scientist conducted, as required by the protocol and § 58.195; document when and where archiving was completed.

■ 15. Add § 58.39 to subpart B to read as follows:

§ 58.39 Principal investigator.

The study director can delegate to principal investigators responsibility for phases of a nonclinical laboratory study but not responsibility for an entire study. For all phases of the nonclinical laboratory study for which the principal investigator is responsible, a principal investigator must:

(a) Sign and date the study protocol, and any applicable amendments, to document agreement to comply with the protocol requirements and the applicable requirements of this part.

(b) Verify that the study is conducted according to the requirements of this part.

(c) Document all deviations noted during the conduct of the study, report those deviations to the study director as soon as possible after discovery, and document that the information was forwarded to the study director.

(d) Submit to the study director either:

(1) The signed and dated reports from all contributing scientists for whom the principal investigator is responsible and any amendments to such reports, any raw data not covered by such reports, and a signed compliance statement indicating any areas of noncompliance; or

(2) Signed and dated report of all phases for inclusion in the final study report. The signed report must include the original principal investigator's report and any amendments, reports of all contributing scientists for whom the principal investigator is responsible and any amendments to such reports, and a signed compliance statement indicating any areas of noncompliance.

(e) Document that all materials and records are appropriately archived, as required by the protocol and § 58.195.

■ 16. Revise § 58.41 to read as follows:

§ 58.41 General.

Any person conducting a phase of a nonclinical laboratory study must have facilities of suitable size and construction to facilitate the proper conduct of nonclinical laboratory studies. Facilities must be designed so that there is a degree of separation that will prevent any function or activity from having an adverse effect on the study.

■ 17. In § 58.43, revise paragraphs (a), (b), and (d) to read as follows:

§ 58.43 Animal care facilities.

(a) Any person conducting a phase of a nonclinical laboratory study that utilizes animals must have a sufficient number of animal rooms or areas, as needed, to assure proper:

(1) Separation of species or test systems,

(2) Isolation of individual projects,

(3) Quarantine of animals, and

(4) Routine or specialized housing of animals.

(b) Any person conducting a phase of a nonclinical laboratory study that utilizes animals must have a number of animal rooms or areas separate from those described in paragraph (a) of this section to ensure isolation of studies being done with test systems or test, control, or reference articles known to be biohazardous, including volatile substances, aerosols, radioactive materials, and infectious agents.

* * * * *

(d) When animals are housed, facilities must exist for the collection and disposal of all animal waste and refuse or for safe sanitary storage of waste before removal from any facility at which a phase of a nonclinical laboratory study that utilizes animals is conducted. Disposal facilities must be so provided and operated as to minimize vermin infestation, odors, disease hazards, and environmental contamination.

■ 18. Revise § 58.47 to read as follows:

§ 58.47 Facilities for handling test, control, and reference articles.

(a) As necessary to prevent contamination or mixups, there must be separate areas for:

(1) Receipt and storage of the test, control, and reference articles.

(2) Mixing of the test, control, and reference articles with a carrier, *e.g.*, feed.

(3) Storage of the test, control, and reference article mixtures.

(b) Storage areas for the test, control, and reference articles and test, control, and reference article mixtures must be separate from areas housing the test systems and must be adequate to preserve the characteristics of the articles and mixtures, including their identity, strength, purity, and stability, as applicable.

■ 19. Revise § 58.61 to read as follows:

§ 58.61 Equipment design.

Equipment, including computerized systems, used in the generation, measurement, maintenance, archiving, retrieval, or assessment of data (or any combination thereof) and equipment used for facility environmental control must be of appropriate design and adequate capacity to function according to the protocol and must be suitably located for operation, inspection, cleaning, and maintenance.

■ 20. In § 58.63, revise paragraphs (a) and (b) to read as follows:

§ 58.63 Maintenance and calibration of equipment.

(a) Equipment must be adequately inspected, cleaned, and maintained. Equipment used for the generation, measurement, maintenance, archiving, retrieval, or assessment of data (or any combination thereof) must be adequately tested, calibrated, and standardized, as applicable.

(b) The written SOPs required under § 58.81(b)(14) and (15) must set forth in sufficient detail the methods, materials, and schedules to be used in the routine inspection, cleaning, maintenance, testing, calibration, and standardization of equipment, as applicable, and must specify, when appropriate, remedial action to be taken in the event of failure or malfunction of equipment. The written SOPs must designate the person responsible for the performance of each operation.

* * * * *

■ 21. Revise the heading of subpart E to read as follows:

Subpart E—Nonclinical Laboratory Study Operations

■ 22. Revise § 58.81 to read as follows:

§ 58.81 Standard operating procedures (SOPs).

(a) The testing facility and all test sites must have SOPs in writing setting forth nonclinical laboratory study procedures that management with executive responsibility is satisfied are adequate to ensure the quality and integrity of the data generated in the course of a study. All deviations from SOPs in a study must be authorized by the study director and must be documented in the raw data. Significant changes in established SOPs must be properly authorized in writing by management with executive responsibility.

(b) The testing facility and all test sites must establish SOPs for all applicable phases of a nonclinical laboratory study. Where appropriate, SOPs must include the following:

(1) Preparation, modification, and administration of all SOPs. These must include procedures for developing and maintaining a historical file of SOPs and all revisions, including the dates of such revisions.

(2) Establishment and periodic review of a GLP Quality System.

(3) Designation and replacement of the study director.

(4) Animal room preparation.

(5) Animal care.

(6) Receipt, identification, storage, handling, mixing, and method of sampling of the test, control, and reference articles.

(7) Test system observations for in vivo and in vitro testing, as applicable.

(8) Laboratory tests.

(9) Handling of animals found moribund or dead during study.

(10) Necropsy of animals or post mortem examination of animals.

(11) Collection and identification of specimens.

(12) Histopathology.

(13) Data handling, storage, and retrieval, including maintenance of the master schedule and all study protocols, and the establishment and maintenance of an archive system.

(14) Validation, maintenance, and calibration of equipment.

(15) Ensuring computerized systems are suitable for their intended purpose and are appropriately validated, operated, and maintained and that electronic records from computerized systems are readily available for review and assessment.

(16) Transfer, proper placement, and identification of animals.

(17) QAU functions, including QA oversight for multisite studies.

(18) Multisite studies.

(19) Designation and replacement of a principal investigator.

(20) Planning, performing, documenting, and reporting inspections conducted by the QAU.

(21) Receipt, review, and followup of all concerns, problems, and regulatory deviations reported by the QAU, including the frequency and content of periodic study reports required by § 58.35(b)(7), and for modifying relevant SOPs when necessary to prevent recurrence.

(22) Certifying copies of study records as true copies of the original that maintain the original intent and meaning.

(c) Each laboratory area must have immediately available laboratory manuals and SOPs relative to the laboratory procedures being performed. Published literature may be used as a supplement to SOPs.

■ 23. In § 58.90, revise paragraphs (b) through (e) to read as follows:

§ 58.90 Animal care.

* * * * *

(b) All newly received animals from outside sources must be isolated and their health status must be evaluated according to acceptable veterinary medical practices. Also, throughout the study, all test animals must be evaluated for their health status according to acceptable veterinary medical practices.

(c) At the initiation of a nonclinical laboratory study, animals must be free of any disease or condition that might interfere with the purpose or conduct of the study. If, during the course of the study, the animals contract such a disease or condition, the diseased animals must be isolated, if necessary. These animals may be treated for disease or signs of disease as deemed necessary by the study's attending veterinarian. The diagnosis, treatment authorizations, treatment description, and each treatment date must be documented and must be retained as part of the study raw data.

(d) Warm-blooded animals, except nursing neonates, used in laboratory procedures that require manipulations and observations over an extended period of time or in studies that require the animals to be removed from and returned to their home cages for any reason (*e.g.,* cage cleaning, treatment, etc.), must receive appropriate identification. All information needed to specifically identify each animal within an animal-housing unit must appear on the outside of that unit.

(e) Animals of different species must be housed in separate rooms when necessary. Animals of the same species, but used in different studies, should not ordinarily be housed in the same room when inadvertent exposure to control, reference, or test articles or animal mixup could affect the outcome of either study. If such mixed housing is necessary, adequate differentiation by space and identification must be made.

* * * * *

■ 24. Revise the heading of subpart F to read as follows:

Subpart F—Test, Control, and Reference Articles

■ 25. Revise § 58.105 to read as follows:

§ 58.105 Test, control, and reference article characterization.

(a) For all test, control, and reference articles other than tobacco products, the identity, strength, purity, and composition or other characteristics which will appropriately define the test, control, or reference article must be determined for each batch and must be documented. For test, control, and reference articles for tobacco products, the chemical composition (including mainstream or aerosol smoke composition, when applicable), microbiological characterization (fermented tobacco products), and design parameters which will appropriately define the test, control, or reference article must be determined for each batch and must be documented. These analyses must be performed by the sponsor or by a contracted person either:

(1) Before study initiation, or

(2) Concomitantly according to written SOPs as required in § 58.81(b)(6). The results of such analyses must be provided to the study director as soon as available. In those cases where marketed products are used as control or reference articles, with the exception of tobacco products, such products can be characterized by their labeling.

(b) Methods of synthesis, fabrication, or derivation of the test, control, and reference articles must be documented by the person who conducts the analyses.

(c) The stability of each test, control, and reference article must be determined as required by the conditions of the study either:

(1) Before study initiation, or

(2) Concomitantly according to written SOPs, as required in § 58.81(b)(6), which provide for periodic analysis of each batch. The results of such testing must be provided to the study director as soon as available.

(d) Each storage container for a test, control, or reference article must be labeled by name; Chemical Abstract Service (CAS) number or code number, where such identification exists; batch number; expiration date, if any; and, where applicable, storage conditions necessary to maintain the identity, strength, purity, and composition of the test, control, or reference article, other than tobacco products. For tobacco product test, control, and reference articles, labeling must include storage conditions necessary to maintain the chemical composition (including mainstream smoke composition), microbiological composition, and design parameters, where applicable. Storage containers must be assigned to a particular test article for the duration of the study. Empty test article containers may be disposed of once the study director verifies and documents the distribution and final disposition of the test article. Approval for the disposal of empty containers must be in writing and signed and dated by the study director.

(e) For studies of more than 4 weeks duration, reserve samples from each batch of test, control, and reference article must be retained for the period of time provided by § 58.195.

■ 26. In § 58.107, revise the heading and introductory text to read as follows:

§ 58.107 Test, control, and reference article handling.

Procedures must be established, as required in § 58.81(b)(6), for a system for the handling of the test, control, and reference articles to ensure that:

* * * * *

■ 27. Revise § 58.113 to read as follows:

§ 58.113 Mixtures of articles with carriers.

(a) For each test, control, and reference article that is mixed with a carrier, tests by appropriate analytical methods must be conducted:

(1) To determine the uniformity of the mixture and to determine, periodically, the concentration of the test, control, or reference article in the mixture; and

(2) To determine the stability of the test, control, and reference articles in the mixture as required by the conditions of the study.

(b) Determination of uniformity, concentration, and stability must be conducted either:

(1) Before study initiation; or

(2) Concomitantly according to written SOPs, as required by § 58.81(b)(6), which provide for periodic analysis of the test, control, or reference articles in the mixture.

(c) The results of such testing, performed by the sponsor or by a contracted person, must be provided to the study director as soon as available.

(d) Where any of the components of the test, control, or reference article carrier mixture has an expiration date, that date must be clearly shown on the container. If more than one component has an expiration date, the earliest expiration date must be shown.

■ 28. Revise § 58.120 to read as follows:

§ 58.120 Protocol.

(a) Each study must have an approved written protocol that clearly indicates the specific objectives and all methods for the conduct of the study. The protocol must contain, where appropriate, the following information:

(1) A descriptive title and statement of the purpose of the study.

(2) Identification of test, control, and reference articles by:

(i) Name;

(ii) Chemical Abstract Service (CAS) number or code number, where such identification exists;

(iii) The name and address of the manufacturer(s); and

(iv) The person(s) determining their characteristics, as applicable.

(3) The name and contact information (including address, phone number, email address, and facsimile number) for the sponsor and the testing facility and the name and affiliation of the study director. Also, for multisite studies, the contact information for all persons conducting a phase of the nonclinical laboratory study, including all principal investigators and independent contributing scientists.

(4) The number, body weight range, sex, source of supply, species, strain, substrain, and age of the test system.

(5) The procedure for identification of the test system.

(6) A description of the experimental design, including the methods for the control of bias in the conduct of the study and the analysis and reporting of study test results and procedures to be followed when a study includes a peer review of any phase. For multisite studies, identification of which phases of the nonclinical laboratory study will be conducted by which person or persons.

(7) A description or identification, as applicable, of the diet used in the study as well as solvents, emulsifiers, and/or other materials used to solubilize or suspend the test, control, or reference articles, as applicable, before mixing with the carrier. The description must include specifications for acceptable levels of contaminants that are reasonably expected to be present in the dietary materials and are known to be capable of interfering with the purpose or conduct of the study if present at levels greater than established by the specifications.

(8) Each dosage level, expressed in milligrams per kilogram of body weight or other appropriate units, of the test, control, or reference article to be administered and the method and frequency of administration. For each test, control, or reference article that is mixed with a carrier for administration, limits for the results of concentration, uniformity, and stability testing and the name and address of the person conducting the testing.

(9) The type and frequency of tests, analyses, and measurements to be made.

(10) A list or description of the records to be maintained for the specific study. For multisite studies, the archive location(s) of study materials and records from all phases of the nonclinical laboratory study.

(11) The dated signature of the study sponsor, the study director, independent contributing scientists, principal investigators, and any other person conducting a phase of the nonclinical laboratory study, as applicable.

(12) A statement of the proposed statistical methods to be used.

(b) For studies that include the use of animals, a committee whose function is to ensure that the care and use of animals is appropriate and humane must review and approve the study before initiation of the study and approval must be documented.

(c) A statement that the study must be conducted in compliance with the provisions of this part, to be signed and dated by the study sponsor and testing facility management with executive responsibility, must be appended to the protocol.

(d) All changes in or revisions of an approved protocol and the reasons for the changes must be documented. These amendments to the protocol must be signed and dated by the study sponsor and the study director. For multisite studies, these amendments must also be signed and dated by all independent contributing scientists, principal investigators, and any other person conducting a phase of the nonclinical laboratory study affected by the amendment. Signed and dated amendments must be maintained with the protocol.

(e) A committee whose function is to ensure that the care and use of animals in studies is appropriate and humane must review and approve any protocol changes that would impact animal welfare before implementation and approval must be documented.

■ 29. Revise § 58.130 to read as follows:

§ 58.130 Conduct of a nonclinical laboratory study.

(a) The analytical methods used for all phases of a nonclinical laboratory study must be demonstrated to be accurate and of sufficient sensitivity to measure, with appropriate precision, the analytes in question.

(b) Test, control, and reference article characterization testing must be conducted as described in subpart F of this part.

(c) Humane care and ethical treatment of test animals must be considered in advance and upheld in conjunction with achieving study objectives. The attending veterinarian must be included in consultations regarding the impact of a given protocol on the welfare of test animals, in particular the recognition and alleviation of species-specific pain or distress and methods of euthanasia. The attending veterinarian must be deferred to when decisions regarding animal welfare arise, particularly when animals are in pain or distress.

(d) The nonclinical laboratory study must be conducted according to the protocol. The person responsible for a given phase of a nonclinical laboratory study must sign and date the protocol, as required in § 58.120(a)(11), before initiation of that phase of the study.

(e) Any change to the protocol must be approved as an amendment, as required in § 58.120(d), before implementation.

(f) The test systems must be monitored in conformity with the protocol.

(g) Specimens must be identified by test system, study, nature, and date of collection. This information must be located on the specimen container or must accompany the specimen in a manner that precludes error in the recording and storage of data.

(h) Records of gross findings for a specimen from post mortem observations must be available to a pathologist when examining that specimen histopathologically, unless specified otherwise in the study protocol.

■ 30. Add § 58.180 to subpart J to read as follows:

§ 58.180 Data quality and integrity.

(a) All data generated during the conduct of a nonclinical laboratory study must be accurate, legible, contemporaneous, original, and attributable (ALCOA). Also, data must be credible, internally consistent, and corroborated.

(b) All data must be recorded indelibly, directly, and promptly to a permanent medium at the time of observation and must identify unambiguously the person entering the data. Any change to any entry must be made so as not to obscure the original entry, must indicate the reason for such change, must indicate when the change was made, and must identify who made the change. When data are either captured or maintained, or both captured and maintained electronically, these requirements are fulfilled by the use of an electronic records system fully compliant with applicable regulations.

(c) All data accrued as required in paragraphs (a) and (b) of this section must be included in the final study report.

■ 31. Revise § 58.185 to read as follows:

§ 58.185 Reporting of nonclinical laboratory study results.

(a) A final study report must be prepared for each nonclinical laboratory study and must include the following:

(1) Name and address of the testing facility and the dates on which the study was initiated and completed. For multisite studies, additionally the name and address of any person conducting a phase of the nonclinical laboratory study, including the location of all independent contributing scientists.

(2) Names of the attending veterinarians for all phases of the nonclinical laboratory study that included the use of animals.

(3) Objectives and procedures stated in the approved protocol, including any changes in the original protocol.

(4) Statistical methods employed for analyzing the data.

(5) Test, control, and reference articles identified by:

(i) Name;

(ii) Chemical Abstract Service (CAS) number or code number, where such identification exists;

(iii) Strength, purity, and composition or other appropriate characteristics, and for tobacco products as described in § 58.105(a);

(iv) The name and address of the manufacturer(s); and

(v) The name and address of the person(s) conducting the testing to define their characteristics, as applicable.

(6) Stability of test, control, and reference articles under the conditions of administration, including the name and address of the person(s) conducting the testing.

(7) A description of the methods used, including methods for the control of bias in the conduct of the study and the analysis and reporting of test results.

(8) A description of the test system used. Where applicable, the final study report must include the number of animals used, sex, body weight range, source of supply, species, strain and substrain, age, and procedure used for identification.

(9) A description of the dosage, dosage regimen, route of administration, and duration, including the results of testing conducted to determine the concentration, uniformity, and stability of mixtures of articles with carriers, as applicable, and the name and address of the person conducting the testing.

(10) A description of all circumstances that may have affected the quality or integrity of the data, including those documented by the study director as described in § 58.33(b)(9) and all health-related issues reported by an attending veterinarian or appropriately designated personnel during the course of the study as described in § 58.90(b) and (c).

(11) The name and affiliation of the study director, the names of all contributing scientists, principal investigators, and other professionals, the sponsor, and all supervisory personnel who were involved in the study or in the preparation or review of the final study report.

(12) A description of the transformations, calculations, or operations performed on the data, a summary and analysis of the data, and a statement of the conclusions drawn from the analysis.

(13) The original, and any amended, signed and dated reports of each of the contributing scientists, principal investigators, or any other person involved in the study, including each person who conducted an analysis or evaluation of data or specimens from the study after data generation was completed. These reports must contain all data generated.

(14) The locations where all specimens, reserve samples, raw data, and the final study report are to be stored.

(15) The statement prepared and signed by the responsible QAU as described in § 58.35(b)(11).

(16) A statement by the study director of the study's extent of compliance with this part, including a discussion of any study deviations found to impact the integrity of the study as described in § 58.185(a)(10).

(b) The final report must be signed and dated by the study director.

(c) Corrections or additions to a final report must be in the form of an amendment by the study director. The amendment must clearly identify that part of the final report that is being added to or corrected and the reasons for the correction or addition, and must be signed and dated by the person responsible.

(d) If for any reason a study is discontinued before completion, the study director must write, sign, and date a short summary report closing the study. This report must discuss the reasons for closure and must be archived, along with all study material, as described in § 58.190.

■ 32. Revise § 58.190 to read as follows:

§ 58.190 Storage and retrieval of records and data.

(a) All raw data, documentation, protocols, final reports, reserve samples, and specimens (except those specimens obtained from mutagenicity tests and wet specimens of blood, urine, feces, and biological fluids) generated as a result of a nonclinical laboratory study must be retained. Correspondence and other documents relating to interpretation and evaluation of data, other than those documents contained in the final study report, must also be retained.

(b) There must be archives for orderly storage and expedient retrieval of all raw data, documentation, protocols, specimens, and interim and final reports. Conditions of storage must minimize deterioration of the documents or specimens in accordance with the requirements for the time period of their retention and the nature of the documents or specimens. A testing facility may contract with commercial archives to provide a repository for all material to be retained. Raw data and specimens may be retained elsewhere provided that the archives have specific reference to those other locations.

(c) Material retained or referred to in the archives must be indexed to permit expedient retrieval.

(d) All study material described in paragraph (a) of this section must be archived no later than 2 weeks after the study completion date (as defined in § 58.3).

(e) If a sponsor delays completion of the final study report, the study director must complete, sign, and date the final study report and archive all study material no later than 6 months after completion of the last draft of the final study report.

(f) If a study sponsor halts a nonclinical laboratory study before all protocol-required testing is completed, a decision that the study is discontinued must be made no later than 6 months after the study was stopped. Once the study has been determined to be discontinued, the study director must prepare a summary report, as required by § 58.185(d). The summary report and all study material must be archived no later than 2 weeks after the study director signs the summary report.

(g) An individual must be identified as responsible for the archives. Archiving specifications for multisite studies must also be included in the approved study protocol.

(h) Only authorized personnel can have access to the archives.

(i) SOPs regarding archiving, required in § 58.81(b)(13), must include specific procedures for removal of study materials from the archives, including maximum timeframes material can remain outside of the archives.

■ 33. Revise § 58.195 to read as follows:

§ 58.195 Retention of records.

(a) Record retention requirements set forth in this section do not supersede the record retention requirements of any other regulations in this chapter nor do they supersede any other legal requirements elsewhere in applicable statutes or regulations.

(b) Except as provided in paragraph (c) of this section, all raw data, documentation, protocols, final study reports, reserve samples, and specimens pertaining to a nonclinical laboratory study and required to be made by this part must be retained in the archive(s) for whichever of the following periods is shortest:

(1) A period of at least 2 years following the date on which an application or submission to FDA, in support of which the results of the nonclinical laboratory study were submitted, is approved or cleared by FDA, a premarket authorization is issued, or the application or submission is administratively closed. This requirement does not apply to studies supporting investigational new drug applications (INDs) or applications for investigational device exemptions (IDEs), records of which are governed by the provisions of paragraph (b)(2) of this section.

(2) A period of at least 5 years following the date on which the results of the nonclinical laboratory study are submitted to FDA in support of an application or submission.

(3) In other situations (*e.g.,* where the nonclinical laboratory study does not result in the submission of the study in support of an application or submission to FDA), a period of at least 2 years following the study completion date or the date on which the study is terminated or discontinued.

(c) Wet specimens (except those specimens obtained from mutagenicity tests and wet specimens of blood, urine, feces, and biological fluids), samples of test, control, and reference articles, and specially prepared material, which are relatively fragile and differ markedly in stability and quality during storage, must be retained only as long as the quality of the preparation affords evaluation. In no case is retention required for longer periods than those set forth in paragraphs (a) and (b) of this section.

(d) Management with executive responsibility must ensure maintenance of the master schedule and copies of study protocols, as specified in SOPs as described in § 58.81(b)(13) and as specified in paragraphs (a) and (b) of this section. QAUs must maintain records of QAU inspections, as required by § 58.35(c) for the period of time specified in paragraphs (a) and (b) of this section.

(e) Summaries of training and experience and job descriptions required to be maintained by § 58.29(d) may be retained along with all other employment records for the length of time specified in paragraphs (a) and (b) of this section.

(f) Records and reports of the maintenance and calibration and inspection of equipment, as required by § 58.63(b) and (c), must be retained for the length of time specified in paragraph (b) of this section.

(g) Records required by this part may be retained either as original records or as true copies that maintain the original intent and meaning and are made according to the person's SOPs as described in § 58.81(b)(22).

(h) If a facility conducting nonclinical laboratory testing goes out of business or for any reason can no longer serve as the archive site for a particular study, all raw data, documentation, and other material specified in this section must be transferred to the archives of the sponsor of the study or to another appropriate archive facility. The facility must notify FDA in writing (and the study sponsor if not the recipient of the study material) of the transfer no later than 10 working days after the transfer occurs.

(i) A copy of the notification of change of archive site, as required by paragraph (h) of this section, can serve as the amendment to the final study report required in § 58.185(c) when appended to that report.

■ 34. Revise the heading of subpart K to read as follows:

Subpart K—Disqualification of Any Person Conducting a Phase of a Nonclinical Laboratory Study

■ 35. Revise § 58.200 to read as follows:

§ 58.200 Purpose.

(a) The purposes of disqualification are:

(1) To permit the exclusion from consideration of completed studies for which a phase was conducted by any person failing to comply with the requirements of the GLP regulations until it can be adequately demonstrated that such noncompliance did not occur during, or did not affect the validity or acceptability of data generated by, a particular study; and

(2) To exclude from consideration all studies completed after the date of disqualification until the disqualified person can satisfy the Commissioner that it will conduct studies in compliance with such regulations.

(b) The determination that a nonclinical laboratory study may not be considered in support of an application or submission to FDA does not, however, relieve the applicant of any obligation under any other applicable regulation to submit the results of the study to FDA.

■ 36. Revise § 58.202 to read as follows:

§ 58.202 Grounds for disqualification.

FDA may disqualify any person conducting a phase of a nonclinical laboratory study upon finding that person repeatedly or deliberately failed to comply with one or more of the regulations set forth in this part (or any other regulations regarding such facilities in this chapter) or repeatedly or deliberately submitted false information in any required report.

■ 37. In § 58.204, revise paragraph (a) to read as follows:

§ 58.204 Notice of and opportunity for hearing on proposed disqualification.

(a) Whenever FDA has information indicating that grounds exist under § 58.202, which justifies disqualification of any person conducting a phase of a nonclinical laboratory study, FDA may issue to that person a written notice proposing that person be disqualified.

* * * * *

■ 38. Revise § 58.206 to read as follows:

§ 58.206 Final order on disqualification.

(a) If the Commissioner, after the regulatory hearing, or after the time for requesting a hearing expires without a request being made, upon an evaluation of the administrative record of the disqualification proceeding, makes the findings required in § 58.202, the Commissioner issues a final order disqualifying that person. Such order must include a statement of the basis for that determination. Upon issuing a final order, the Commissioner notifies (with a copy of the order) the disqualified person of the action. The notification also will explain that a person who is disqualified under this part will be ineligible to receive a test article under part 511 of this chapter. A clinical investigator ineligible to receive a test article under part 511 of this chapter will be ineligible to conduct any nonclinical laboratory study intended to support an application for a research or marketing permit for a new animal drug.

(b) If the Commissioner, after a regulatory hearing or after the time for requesting a hearing expires without a request being made, upon an evaluation of the administrative record of the disqualification proceeding, does not make the findings required in § 58.202, the Commissioner issues a final order terminating the disqualification proceeding. Such order must include a statement of the basis for that determination. Upon issuing a final order the Commissioner notifies that person and provides a copy of the order.

■ 39. Revise § 58.210 to read as follows:

§ 58.210 Actions upon disqualification.

(a) Once a person has been disqualified, each application and submission to FDA containing or relying upon any nonclinical laboratory study for which a phase was conducted by the disqualified person may be examined to determine whether such study was or would be essential to a decision. If it is determined that a study was or would be essential, FDA must also determine whether the study is acceptable, notwithstanding the disqualification of that person. Any study for which a phase was conducted by the disqualified person before disqualification may be presumed to be unacceptable, and the person relying on the study may be required to establish that the study was not affected by the circumstances that led to the disqualification, *e.g.,* by submitting validating information. If the study is then determined to be unacceptable, such data will be eliminated from consideration in support of the application or submission to FDA and such elimination may serve as new information justifying appropriate regulatory action.

(b) No nonclinical laboratory study for which any phase was begun by a disqualified person after the date of that person's disqualification can be considered in support of any application or submission to FDA, unless the disqualified person has been reinstated under § 58.219. The determination that a study may not be considered in support of an application or submission to FDA does not, however, relieve the applicant of any obligation under any other applicable regulation to submit the results of the study to FDA.

■ 40. Revise § 58.213 to read as follows:

§ 58.213 Public disclosure of information regarding disqualification.

(a) Upon issuance of a final order disqualifying a person under § 58.206(a), the Commissioner may notify all or any interested persons. Such notice may be given at the discretion of the Commissioner whenever the Commissioner believes that such disclosure would further the public interest or would promote compliance with the GLP regulations set forth in this part. Such notice, if given, must include a copy of the final order issued under § 58.206(a) and must state that the disqualification constitutes a determination by FDA that nonclinical laboratory studies for which a phase was performed by the disqualified person will not be considered by FDA in support of any application or submission to FDA. If such notice is sent to another Federal Government agency, FDA will recommend that the agency also consider whether or not it should accept nonclinical laboratory studies for which a phase was performed by the disqualified person. If such notice is sent to any other person, it states that it is given because of the relationship between the disqualified person and the person being notified and that FDA is not advising or recommending that any action be taken by the person notified.

(b) A determination that a person has been disqualified and the administrative record regarding such determination are disclosable to the public under part 20 of this chapter.

■ 41. Revise § 58.215 to read as follows:

§ 58.215 Alternative or additional actions to disqualification.

(a) Disqualification of any person under this subpart is independent of, and neither in lieu of nor a precondition to, other proceedings or actions authorized by the Federal Food, Drug, and Cosmetic Act. FDA may, at any time, institute against a disqualified person or against the sponsor of a nonclinical laboratory study that has been submitted to FDA, or both, any appropriate judicial proceedings (civil or criminal) and any other appropriate regulatory action, including civil money penalties, in addition to or in lieu of, and before, simultaneously with, or subsequent to, disqualification. FDA may also refer the matter to another Federal, State, or local government law enforcement or regulatory agency for such action as that agency deems appropriate.

(b) FDA may refuse to consider any particular nonclinical laboratory study in support of an application or submission to FDA, if it finds that the study was not conducted according to the GLP regulations set forth in this part, without disqualifying any person that conducted one or more phases of the study or undertaking other regulatory action.

■ 42. Revise § 58.217 to read as follows:

§ 58.217 Suspension or termination of any person conducting a phase of a nonclinical laboratory study by a sponsor.

Termination of any person conducting a phase of a nonclinical laboratory study by a sponsor is independent of, and neither in lieu of nor a precondition to, proceedings or actions authorized by this subpart. If a sponsor terminates or suspends any person conducting a phase of a nonclinical laboratory study from further participation in a study that is being conducted as part of any application or submission to FDA that has been submitted to any Center of FDA (whether approved or cleared, premarket authorization issued, or administratively closed), the sponsor must notify that Center in writing within 15 working days of the action; the notice must include a statement of the reasons for such action. Suspension or termination of any person conducting a phase of a nonclinical laboratory study by a sponsor does not relieve the sponsor of any obligation under any other applicable regulation to submit the results of the study to FDA.

■ 43. Revise § 58.219 to read as follows:

§ 58.219 Reinstatement of a disqualified person.

Any person that has been disqualified may be reinstated as an acceptable source of data for a phase of a nonclinical laboratory study to be submitted to FDA if the Commissioner determines, upon an evaluation of materials submitted by that person, as well as the results from an FDA inspection of that person, that procedures are in place that would allow that person to conduct a phase of future nonclinical laboratory studies in compliance with the GLP regulations set forth in this part. As noted in § 58.210(b), no nonclinical laboratory study for which a phase was begun by a disqualified person after the date of that person's disqualification is considered in support of any application or submission to FDA, unless that person has been reinstated. A disqualified person that wishes to be so reinstated must present in writing to the Commissioner reasons why it believes it should be reinstated and a detailed description of the corrective actions it has taken or intends to take to assure that the acts or omissions which led to its disqualification will not recur.

The disqualified person must also state its availability for inspection. If a disqualified person is reinstated, the Commissioner must so notify that person and all organizations and persons who were notified, under § 58.213 of the disqualification of that person. A determination that a disqualified person has been reinstated is disclosable to the public under part 20 of this chapter.

Dated: August 16, 2016.

Peter Lurie,

Associate Commissioner for Public Health Strategy and Analysis.

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